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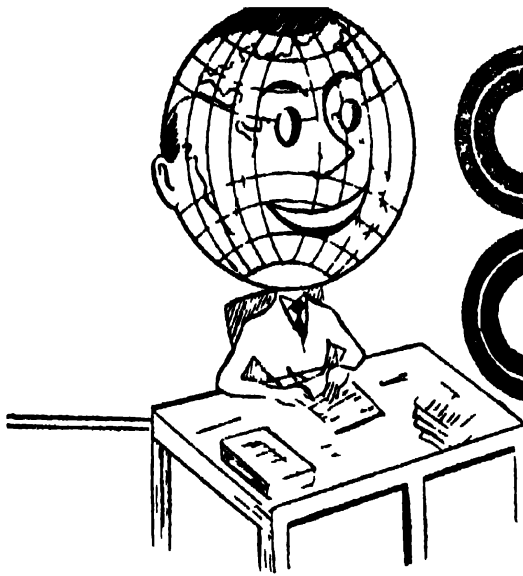
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EDITORIAL

HISTORY OF THE NEW NAGA SET-UP

The inauguration of Nagaland interim administrative set-up at Kohima on February 18, 1961 by the Governor of Assam Gen. Srinagesh marked a major development in Naga affairs and a big step towards the realisation of the long-cherished aspiration of the Naga people for an autonomous homeland. Among a large gathering of delegates from all the 16 Naga tribes the Governor of Assam, who will also be the Governor of the Nagaland, formally inaugurated the Naga Advisory Council and the Executive Council and later administered the oath of office to the members of these two councils. Under the interim arrangements agreed to the Naga tribes have elected a 45-member Interim Body which will assist and advise the Governor of Assam in the day-to-day administration of the Naga Hills-Tuensang area until the full-fledged State of Nagaland comes into being. The Governor has nominated an Executive Council out of and in consultation with the 45-member Interim Body, which will act as the local legislature. The Executive Councillors will function from Kohima, the headquarters of the new State and will work in close collaboration with the Commissioner of the new State. Though during the interim period the Governor, acting on behalf of the External Affairs Ministry, will be responsible for all matters, two subjects, namely, law and order and finance will be administered specifically by him. The rest will be transferred to the Executive Council, though its advice will not be legally binding. The reservation of the portfolio of law and order for the Gover-

nor it is explained, is made imperative by the size and scope of hostile activity in the countryside. So long as the Naga Hills do not return to normalcy and so long as the presence of our security forces is necessary there, the Union Government must carry the responsibility for this sphere of administration. Since the Centre also provides almost the entire budget local revenue being around Rs 5 lakhs against an annual expenditure of about Rs 1 crore, finance too will continue to be a Central responsibility. As the new State's financial resources will be extremely limited and dependent on the Central Government might be necessary not only for development schemes but also to maintain the efficiency of the administration the Governor would have a general responsibility for ensuring that funds made available by the Government of India were expended for the purposes for which they were approved by the Central Government. Safeguards have been provided for the religious and social practices of the Nagas, their customary laws and the ownership and transfer of land. The existing laws relating to the administration of civil and criminal justice would otherwise remain in force.

The inauguration of the new set-up, it is hoped, will soon put an end to the Naga hostilities. The delegation which negotiated the interim agreement claimed to represent 11 of the 14 Naga tribes and 90 per cent of the population. Only a small number of hostiles, not more than 1500—are still carrying on their depredations but their number is dwindling and they do not

carry any support or sympathy by the rest of the Nagas. Though the hard core of the Naga rebels has lately stepped up its hostile activity, the Government has also become determined to deal effectively with the hostile element and put an end to their reign of terror. The underground elements and their overground friends are likely to lose ground gradually for two main reasons. First the very fact that the Government of India goes ahead with its scheme for Naga Statehood will put an end to hostile hopes of being able to win further concessions. Their vain dream of an independent Nagaland is shattered for ever and they will have to submit to the will of 90 per cent Nagas who have seen the reason and agreed to have a Naga State within the Indian Union. Secondly with popularly elected Naga Councillors and legislators being actively associated with if not actually in charge of the task of administration the sting will go out of the dissident argument of outsiders' ruling them. The fact of Naga leaders being in seats of power will also act as a great morale-builder with the Naga population in general. The Government on its part is quite clear about one thing it has gone as far as it could in agreeing to Statehood for the Nagas. If after the effect of Statehood hostiles continue their reign of terror they must be fought on their own ground and with their own weapons. The Government has also taken some severe steps lately to put down the activities of the rebel Naga Regular army units have been moved from Shillong to the disturbed areas to maintain law and order. The policy of persuasion having largely failed in its objective the hostiles are likely to be put down with a firm hand and any manifestation of sympathy or friendship by the populace to the underground may be met with punitive action. Now the Government has done its best to agree as far as possible to the long cherished desire of the Naga people for a Naga homeland it is imperative to take stern measures against the hostiles to bring peace to the long disturbed frontier areas of the country.

The Nagas in India number about 400,000 divided into over 20 tribes differing widely in language and custom. The population live in 713 villages occupying an area of 6,600 square miles of mountainous territory. Nagaland is hemmed in on the west by Assam which together with the

Tirap Frontier Division of NEFA, also encircles it on the north. The southern boundary is formed by Manipur and the eastern by Burma. About two lakh Nagas inhabit the contiguous areas of Manipur and the Tirap Frontier Division of NEFA. One or two of the Naga tribes live across the frontier with Burma, to the east. Christianity is the dominant religion of the Nagas, more than half the population being Christians. The rest are animists. The outstanding feature of all the Nagas is their craving for human heads. Though the custom of head-hunting has largely been abandoned due to the influence of Christian missionaries, it is believed that some primitive tribes in unadministered Naga areas still practice it.

The early history of the Nagas is lost in oblivion. In the period between 1839 and 1850 the Nagas made raids on the border areas and disturbed the peace of the people of the plains. To punish the raiders the first British Indian expedition into the Naga Hills was conducted in 1839. A new district the Naga Hills, was formed in 1866 with its headquarters at Samaguting. In 1871 Assam became a Chief Commissioner's province and the headquarters of the Naga Hills was transferred to Kohima. In 1888 the whole Naga area was formed into the Naga Hills district of Assam. Under the First India (Laws and Regulations) Act of 1870 the Naga areas were termed "unadministered" but formed part of the province of Assam. The Montague-Chelmsford reforms of 1918 described them as "backward areas". The Government of India Act of 1935 divided these "backward areas" into "administered" and "unadministered" areas. In law, they remained part of Assam. With the transfer of power in 1947 the "unadministered areas" adjoining the Naga Hills district were incorporated in the NEFA and designated as "Naga tribal area" and later as Tuensang Frontier Division.

The first signs of political awakening among the Nagas came in 1928 when a few educated Nagas submitted a memorandum to the Simon Commission demanding that the Naga areas be excluded from the proposed reforms and kept under direct administration to prevent "colonialism" by outsiders. Proposals for forming the hill tribes of the Indo-Burmese frontier into a separate British colony (the "Copeland plan") were put forward in 1946, in which

year the Naga National Council was founded with official encouragement. After the achievement of Indian independence the Council agreed to accept Indian suzerainty for a trial period of 10 years, but when the Indian Constitution (which provided for autonomous districts in the tribal areas of Assam) was adopted in 1949 the Naga leaders denounced it as a breach of faith. The Council thereupon adopted a policy of non-cooperation with the Government. No candidates for the 3 seats allotted to the Naga Hills in the Assam Legislative Assembly were put forward at the 1952 general elections, and it proved impossible to establish a district Council in the Naga Hills, such as were formed in the five other autonomous districts of Assam. The separatists' attitude was attributed to fears that the extension of Government control and improvement of communications might result in interference with their tribal way of life, and to the traditional hostility between the hill tribes and the Assamese. The Council's policy, however, was not universally supported among the Nagas, a large portion of whom cooperated with Government projects for community development.

In July 1952, Mr. Nehru granted an interview to Phizo, the rebel leader, in Dibrugarh and made it clear that the demand for independence was "absurd" and could not be considered. From then onwards, the Naga movement began to assume a violent character and most of the leaders of the Naga National Council, including Phizo, went underground.

The disorders in the Tuensang division began in March 1955 under the leadership of a certain "Hongkong" (who was suspected to be Mr. Phizo himself), taking the form of attacks on members of the Assam Rifles—a semi-military border police force—and on loyal village headmen. Troops were sent to the district in April, and on July 20, 1955, following an increase in terrorist activities by armed gangs it was officially declared a "disturbed area". After military operations extending over many months, in which nearly 300 people were killed, Mr. Nehru stated in March 1956 that conditions in the affected areas had returned to normal.

Mr. Phizo, who disclaimed all connexion with the disturbances, had met the Chief Minister of Assam (Mr. Medhi) at Shillong on August 18, 1955, and together

with other Naga leaders, had signed a declaration condemning terrorism and promising that the Naga National Council would use peaceful methods only. Phizo's more responsible associates resigned from the Naga National Council in September 1955 and formed a liberal party with the object of achieving satisfactory solution through peaceful negotiations. In January 1956, however, shortly before the date fixed for a general meeting of the Council, Mr. Sakhrie, leader of the faction opposed to Mr. Phizo's methods and separatist aims, was kidnapped and murdered, and terrorist activities broke out in the Naga Hills district. The Assam Government declared the district a "disturbed area" on January 31, 1956, and subsequently issued a warrant for Mr. Phizo's arrest on charges of murder, rioting, abduction and complicity in the murder of Mr. Sakhrie. New Military operations were begun on January 31 by the Assam Rifles and Indian Police, and in March 1956 Army units sent to the area at the Assam Government's request.

The rebels, who were believed to be suffering from a shortage of supplies, made no offensive move between August and October, 1956. On August 13 fighting broke out near Kohima between rebel factions who favoured and those who opposed the continuation of violence. The number of persons surrendering to the authorities showed a marked increase during this period, and in the last week of September, for the first time, two villages submitted collectively, handing over the rebels in their midst together with their weapons. Nevertheless, several serious incidents were reported in November and December 1956.

Mr. Nehru stated in the Lok Sabha on August 23, 1956 that he himself had met Mr. Phizo and other Naga leaders half-a-dozen times in the past, and each time Mr. Phizo had subsequently represented the meeting as a concession to his claim for independence. In consequence, he (Mr. Nehru) had insisted that violence and the demand for independence must be abandoned before there could be any further meetings. An amnesty had already been proclaimed, the only persons excluded from it being those who had committed murder.

Six Naga leaders who had repudiated Mr. Phizo's violent methods, and the demand for independence, met Mr. Nehru in Delhi on September 15, '56 and put forward

proposals for the unification of all Naga areas in the Tuensang division, Assam, and Manipur under a single administration. They claimed that nearly half the Naga people shared their views, and that, given the necessary facilities, it would be possible to win over the majority of the remaining half, with the exception of about 500 who formed the "core" of the rebel movement. Mr. Nehru gave an assurance that as soon as peace was restored the Government would be willing to consider any change in the present set-up in full consultation with the Naga people, subject to unity, integrity, and security of the Indian Union.

A Convention of the loyal Naga leaders, sponsored by the Assam State Government and attended by 1785 representatives of 19 sub-tribes and nearly 2000 observers from various regions of Nagaland, met from August 22 to 26, 1957 at Kohima. The Convention unanimously adopted a resolution demanding the integration of the Naga Hills district of Assam and the Tuensang Frontier Division (which was administered by the NEFA) as a single administrative unit under the Indian External Affairs Ministry, to be administered by the Governor of Assam on behalf of the President. This proposal (which meant the abandonment of the earlier demand for the independent Naga State) was envisaged as an "interim arrangement" pending a permanent political settlement within the Indian Union. Another resolution appealed to the Naga rebels to "give up the cult of violence" and to cooperate for good of our land and the free development of our people according to our traditions."

Mr. Nehru received in Delhi on September 25, 1957 a 9-man delegation led by Dr. Imkingliba Ao, formerly a lieutenant of the rebel leader Zapu Phizo. Mr. Nehru readily accepted the proposal for the formation of a Naga administrative unit under the Central Government. He also announced an amnesty for all offences committed by the Naga hostiles.

A bill uniting the Naga areas of India into a single administrative unit was introduced by the Home Minister, Mr. G. B. Pant, in the Lok Sabha on November 20 and was passed on November 25, 1957. The Bill came into operation on December 1, 1957, on which date the Governor of Assam, Mr. Fazl Ali, took over the administration of the new Naga-Hills-Tuensang Area on

behalf of the President. In spite of the concessions made by the Indian Government to the Naga demands, a section of the Naga rebels continued their activities during October-November 1957, raiding loyal villages, snipping at military envoys and patrols, and blowing up bridges.

A second Convention of the liberal Naga leaders was held in May 1958 at a place called Ungma in Mokokchung district of Naga Hills-Tuensang Area. This Convention appointed a Liaison Committee to contact the underground elements and win them over to support the Convention's policy of securing the maximum autonomy of their area and finally settling the future of the Nagas. The response to this convention's appeal was not encouraging.

Over 3000 delegates attended a third Naga Peoples Convention which met in the small hill town of Mokokchung in the NHTA from October 23 to 26, 1959. The Convention prepared a 16-point memorandum for consideration of the Government. The main demand was for the constitution of separate State within the Indian Union to be known as Nagaland. There was general satisfaction in official circles in New Delhi that the Draft Constitution adopted by the Naga Peoples Convention as a basis of settlement had categorically and unanimously abandoned the idea of sovereign independence misleadingly held out by Phizo and his followers. This was said to be a major step forward and marked a turning point in the Naga situation.

On July, 1960 Mr. Nehru received a 15-man Naga delegation headed by Dr. Imkingliba Ao. An agreement on the establishment of a separate Naga State within the Indian Union was reached on July 30. Mr. Nehru announced in the Lok Sabha on August 1, 1960 that the Government of India had decided to constitute a new State of Nagaland. The working Committee of the Naga Peoples Convention, on August 22, 1960 ratified the Delhi Agreement on the creation of Nagaland. It also decided to set up an interim body to advise the Governor in the NHTA until the creation of the new State.

Now that the aspirations of the Nagas have been fulfilled after the inauguration of the new Naga administrative set-up, it is hoped that peace will return to this strategic border area.

*As every thread of gold is valuable,
so is every minute of time.*

VALUE OF TIME

By Robert Heap

It may seem that **Time** is a somewhat abstract subject to select for an article. Yet Time is extremely important, if only because we have a limited and unpredictable supply of it!

Young people, especially, may be lured into a state of foolish complacency by the thought that they have a "whole lifetime" in front of them, during which they can do all that they wish to do at a leisurely pace. Well, how long is a "lifetime"? It may be seventy to eighty years, or even longer. Or it may be only thirty years or even less. We just don't know now much time there is ahead of us. Yet one thing is certain. During the span of our lives, Time treats us all alike. It has no favourites. Twenty-four hours are a day to both king and peasant. No more. No less. And the utilisation of Time is the determining factor upon which the successful life is built.

The utilisation of Time—"managed minutes"—is of vital importance to everyone. It may be difficult to realise that the "wastage" of to-day will be a drag upon to-morrow and that each passing minute is a tool with which to fashion the future. How many men and women who have frittered away Time down through the years look back upon life with sadness and regret, thinking, "If only I had done this," or "If only I hadn't done that, how different things would have been to-day." It is the old story of "what might have been."

When we are young, Time passes slowly but as we grow older, it passes with frightful swiftness. Some of us would, if we could, wander back over the path we have trod and take advantage of the opportunities we missed to do those things we ought to have done. But we cannot turn back the relentless tide of Time. Time Policies cannot be renewed—they are not like Insurance Policies.

Life's greatest asset

Time is one of our greatest assets. It is indeed very precious. Each minute is a golden treasure and the way we spend it moulds our very lives.

We have all heard business men dec-

an indirect and strictly material sense. One writer was so conscious of the value of Time that he said we ought to count Time by our own heart beats. This appreciation of the value of Time suggests the purpose of this article—to emphasise the fact that although we may accept the materialist's view that "Time is money," we shall do well to realise that Time is Life itself. **This** is the conception of Time that we should embrace and always hold in our thoughts.

We should have no difficulty in treating Time with a healthy respect. Those of us who are in employment sell not only our labour and skill to our employer, but also our time, and that time represents a substantial part of our **lives**. Our employer himself has to devote a considerable portion of **his** time to his business affairs, or he may soon find himself in trouble.

A reliable and efficient wife spends most of her time in running the house, planning and cooking meals, shopping, mending and performing countless other tasks which her duty demands. If she is also a mother she has to devote a lot more of her time to the needs of her children as well. Indeed, she then has so little, if any, time left for herself alone, that time to her is more precious than gold.

An ex-soldier once remarked to me that a former C.O. of his was what he called "a stickler for time." If that C.O. ordered anything to be done, however trivial, **by a certain time**, it had to be done "on the dot." Otherwise he would create an awful scene about it, no matter if he had merely requested a cup of tea at "15.00 hours" precisely. The fact that the cup of tea might not arrive at the exact moment he ordered it, could not have been **all** that important to him, but—as he frequently reminded his men—Time **could** be a matter of life or death. This is true enough, and that C.O. knew that if his men were trained to complete even **unimportant** tasks at the time ordered they would certainly act "on the dot" when a highly important order was given. In short, he knew he could always **rely** upon them to do their duty without hesitation or question, when **lives** were at stake. Moreover,

mand returned to civilian life, the **habit** of punctuality stood them in good stead. Then they were likely to be more efficient in this respect in their daily work. Good time-keeping suggests general efficiency.

Scheduled Time

A simple example in daily life is offered by the railway timetable. The travelling public expect to be able to rely upon the departure and arrival times of trains as published in the timetable. Otherwise, how can travellers plan their own appointments? Suppose we wish to catch a train scheduled to leave the local railway station at 10 a.m. If we are wise, we are there on the station platform a few minutes before the train is due to leave, and we rightly expect to catch the train. What would we say if we were then informed that the train left at 9.45 a.m.? We should have every reason to complain to railway officials about such lack of consideration. Fortunately this situation is not at all likely to occur, but **late** trains can and do cause no end of inconvenience to those who use them, or wait for passengers to arrive on them. Most of us are reasonable enough in such matters. We realise that many unexpected and unpredictable circumstances may delay the journey of a train, but when trains are **persistently** late, the public understandably, begin to lose their patience. Soon the whole railway service and everybody connected with it comes under adverse criticism. They are labelled "inefficient"—and that label, sticks fast for a long time to come, unless the service is quickly and satisfactorily improved. Time must be respected, if only as a mark of efficient service.

A wealth of meaning

Now let us look at Time from another angle. Consider the old adage: "Time will tell." This saying alone conveys a wealth of meaning.

Time will tell **what**? Many things are revealed to us by the passage of time, not only concerning that indefinite period "from the cradle to the grave," but even before and after that! One or two examples will suffice.

An expectant mother begins to wonder many things about the child she hopes to bring into the world. Will she be able to carry the unborn child for the full term?

cations and possible danger to it and herself? Will it be a boy or a girl? Will it be perfectly formed at birth? Will it grow to manhood or womanhood? What will the child's future be in terms of health, happiness and success? **Only time will tell**, and the mother has to wait and see, with whatever patience and faith she can muster.

On numerous occasions throughout the life of every individual one has to wait for a period of time to elapse, before one can know the effect of some action we took, perhaps years before.

Then, towards the end of our earthly life, when we know there may not be many years ahead of us, we have ample time to sit and think. We shall probably turn over in our mind the eternal question: Is "death" the end of our individual, personal, conscious existence? Or does a spiritual body within us release itself from our mortal frame, to live an eternal life in a spiritual Utopia called heaven? We hope to discover the answer to these questions—in time.

Coming back to our workaday existence, imagine a business management deciding to change its policy in some respect, or its production methods. Will this change produce the results hoped for and expected? Time alone will reveal the answer.

It has been truly said that Time makes more converts than Reason. Many people don't even bother to reason things out, but even if we permit reason to be our guide, we must admit that the reasoning powers of the human mind are often faulty. Or, rather, we may easily base our reasoning upon a false assumption. We can, however, usually rely upon Time to provide the correct answer to any doubt. More problems are solved by Time than by brains. Many of life's problems are solved by waiting. When at times we may be worried because we don't know what to do, it is often best to wait. Time will often provide the solution.

Time also brings many changes. Opinions, fashions, morals, standards, living conditions—everything, in fact, changes with the passage of Time. Some things improve, some things degenerate, some things merely age, rot and disintegrate. In all cases Time means change, for nothing pertaining to this world remains static.

Generally speaking, Time brings maturity, then antiquity, then destruction.

Human relationships

Time takes on another important significance when we associate it with personal, human relationships. For example, an employer engages a new man, probably an absolute stranger. He may be a good, conscientious worker, of unimpeachable integrity and capability. Alternatively, he may turn out to be idle, incompetent, or even a downright rascal. Time will test him. In time, the employer develops confidence and trust in the new man, or he is disappointed to discover that he would be far better off without him.

An inspiring fact about Time is that it permits acquaintanceship to ripen into friendship, with all the pleasures, advantages and opportunities to serve, that true friendship provides. Between persons of opposite sex, Time can allow friendship to develop into love, and love into the intimacy of marriage. In such cases Time is the most valuable ally we can have.

Time also hides life's many scars. It is a wonderful **healer**. The heartbreak that follows a shattered romance; the grief of a bereaved wife, mother, husband or child; the shock of a great injustice; the pain of a physical sickness or injury; the shadow of international misunderstandings disagreements, threats and hatreds; the horrors of war; the fear of the unknown and of death itself. All these things are healed with the passing of Time.

There is also a right time and a wrong time for many of our activities. A time to work and a time to relax; to speak or to remain silent; to go forward or to hold back; to sow and to reap; to praise or condemn; to fight or submit. If we dare to ignore the existence of these right and wrong times we shall make a shocking mess of our own affairs and shall probably involve others through our stupidity or thoughtlessness.

There are further fascinating and thought-provoking aspects of Time. The meaning of Time has baffled scientists and philosophers. Time cannot be explained nor can its source be found or its end foretold. Time stretches away into the illimitable. Yet Time must have existed at least as long as Life itself. Time is, and always has been with us. We are chiefly conscious

of the present period of Time, but we remember something of the past and we can project our thoughts and dreams into the future. When we sleep, we lose all sense of Time, yet the seconds, minutes and hours by which we attempt to measure Time, are ticking away, relentlessly, shortening the remainder of our earthly lives. When we are bored, lonely or unhappy, Time seems to walk with leaden feet. Yet, when we are particularly happy or busy, Time has wings. It flies away so quickly, we hardly believe that so much Time has flashed past. Truly, grief counts seconds and happiness forgets hours.

Time creeps up on us, silently, remorselessly. We are powerless to halt its progress, even if we would. Yet once a period of time has passed, it has gone for ever. We cannot recapture it to use again. Although Time destroys so much it also creates one thing as it destroys another.

In this modern age many of us have more leisure time than we have ever had in our lives. Yet we never seem to have **enough** time to do all the things we wish to do. There are so many ways of using our leisure time to every advantage.

Yet we still hear some people talk about "killing time." These are usually the aimless, unsuccessful individuals. They apparently do not realise that by killing Time they are often really killing their own opportunities in life. The individual who succeeds is the one who makes Time live and by making it useful.

The Pattern of life

Having discussed all these points concerning Time, let us retrace our steps to draw our own conclusions. We have gathered the following thoughts about Time.

Time is limited to us—as our lifetime. We do not know how much of it we shall be able to use, yet it has no beginning and no end. Time is Eternity. We can restrict our **attitude** towards Time, by thinking of it in the strictly narrow and material sense as representing money. Or, we can regard Time as our opportunity—to acquire knowledge, to perform useful service, to reach maturity, to gain a certain amount of wisdom. We can use a lot of Time as we wish. We can make it our friend or our enemy. We can enjoy the

(Continued on page 222)

CAMPUS LIFE

By Smt. Hansa Maheta

If the aim of University education is not to produce mere intellectuals but to produce around integrated personalities then the role of campus life must be fully recognised as contributing towards this goal. For a good campus life plays an important part in helping the student to grow intellectually, socially and culturally. Psychologists say that environment affects the growth of a child. A healthy environment helps its proper development while an unhealthy environment retards its growth or warps its nature. In the same way campus life affects the student in a healthy or unhealthy way according to the nature of the life a University campus provides.

A University campus means where all academic activities of the University are centered, where the teachers and the taught live within easy distance of each other; and where physical, cultural and social activities are provided through students' clubs, Union, Gymnasium, Sports fields etc.

The campus has to be pleasing to the eye from the aesthetic point of view with houses well spaced, i.e. not too far flung and not too congested; with shaded walks and flowering trees. It should provide for good living conditions for students as well as the staff. The students' hostels or halls of residence should be well constructed and furnished so as to provide for such amenities as would make life not too uncomfortable. There are many hostels today which do not provide for even the simple amenities and thus add to the frustration of students. It is also essential that each hall of residence is in charge of a teacher who lives on the premises and acts as the warden of the hall. Such a warden has to be carefully selected as he is required not only to maintain discipline among the students but to look after them and help in solving their personal problems. Unless he is a man of high integrity and a person whom the students can respect, he will not be able to carry out his duties efficiently.

The teachers on the University staff should also be adequately housed on the campus so that they are easily available to the students who would desire their help. This would also help to promote the contact between the teachers and the taught so necessary for maintaining discipline

among students and thereby help in the healthy growth of University life. It has been pointed out again and again that one of the reasons for the present indiscipline among students is the lack of contact between the teachers and the taught. It is necessary for them to meet outside the lecture room, i.e. socially; and that is possible if the teachers also live on the campus.

A good campus has to provide academic facilities by way of lecture rooms, libraries, reading rooms, common rooms, auditoria, etc. If the lecture rooms are not sufficient in number there is overcrowding in the class as one room would have to accommodate a number which would require two rooms. Even if classes are divided into smaller groups, unless there are sufficient number of rooms, the divisions would have to be taken in shifts. This would mean that some students would have to remain idle unless there are reading rooms or libraries where they can go. An idle mind is devil's workshop and idle students are an easy prey to devil's pranks. Students who have no class and no other diversion are found loitering about creating trouble for others who are attending their class. They walk in corridors shouting and making enough noise so as to disturb the class. Such indiscipline can be easily controlled if there are facilities for libraries, reading rooms or common rooms where students can spend their spare time more fruitfully.

Young freshmen in Universities however are not interested in books or reading all the time. They are physically active and need physical activities to keep them occupied. A gymnasium, sports field for outdoor games and facilities for indoor games would go a long way in canalising the physical energy of students which otherwise would be diverted to unhealthy activities. National Cadet Corps and Auxiliary Cadet Corps have done a lot of good to students. Suitable premises should be provided for their headquarters on the campus. This will popularise their activities and more students will be attracted to them.

Besides the physical activities there should be facilities for extra curricular activities in the intellectual and cultural

fields which would help the student to make the best use of his time. The students' union should be the central agency for organising these activities. It can organise debates, symposia and entertainment programmes. Clubs for dramatic activities, music, photography, film, hiking, etc. can be organised by the Union. Unfortunately the word 'Union' has lately got into a bad odour. The students in some Universities have used it as if it was trade union. They think that their union is the body through which they can represent their grievances to the authorities concerned. If, however, it is made clear in the constitution of the union that its aims and objects are to promote intellectual, social and cultural activities only and any other activity would be unconstitutional and therefore would not be encouraged or permitted they would think twice before using the Union for a purpose for which it is not meant. Students however should have some other means of ventilating their genuine grievances. Otherwise they will seek help from persons outside the University and this would not be desirable at all as it would lead to busy bodies interfering in University affairs.

A question is often asked as to whether students are not likely to occupy themselves too much with extra curricular activities to the detriment of their studies. A balance has to be struck between the extra curricular activities and with the class work of students. No student should be allowed to neglect his class work. If the extra curricular activities are organised systematically under the general supervision and guidance of teachers, the danger of a student neglecting his studies would be less. Some Universities have organised University Weeks when students have a varied programme of activities like debates, entertainment, sports, etc. These 'Weeks' are generally held between the two terms so that they do not interfere with the students' studies which are particularly heavy in the second term. Extra curricular activities are an essential part of a students' education. They provide for him a medium for self-expression. Some students are good at sports, some at debate, and some at entertainment and it is very necessary that opportunities for self-expression be given to students to prevent any feeling of frustration. Students' Unions should be shouldered with the responsibility

of organising these extra curricular activities; and with the help and guidance of teachers they can undertake the task with success. If the responsibility of arranging functions and keeping order at them rests with the students, it creates in them a sense of responsibility and teaches them self-discipline. The N.C.C. Cadets have, for instance, shown a great sense of responsibility and discipline and are always helpful in maintaining order at large gatherings.

While the campus life provides many advantages the picture would not be complete unless some dark spots are also pointed out in the picture. It is easy to create trouble on the campus by even a handful of students if they wish to do so. Students are an inflammable material and a single spark is sufficient to cause a conflagration. Many interested parties have taken advantage of this knowledge. The Union being the central organisation of students, election to its various offices have been financed by political parties to capture 'power' in the Union. The office bearers do wield some influence on the student body because of their office, some of these office bearers are paid by interested parties to create trouble. Even the teacher politicians use the students for their own purpose. The so-called indiscipline among students is really due to these extraneous factors.

Again the students' behaviour pattern would not be very different from the general pattern of behaviour outside the University campus. It only reflects the social behaviour in general. There is a marked general social degeneration in almost all spheres of life during the past few years. Society today is dominated by politicians and often by unscrupulous persons. It is also a fact that there is no discipline among them and they use all means to gain or retain power. Why then blame the students if they follow the example of these leaders? I know of a student who told me one thing and behaved in a different way. When I asked him why he did that he said it was politics, he had to do it in order to gain advantage over his rival. I do not know what he thought of me when I told him that his notion about politics was all crooked.

The students' behaviour has also been influenced by the film world. The adoles-

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One World—But How ?

By Dr. Alexander F. Skutch

Today we hear on every hand that this has become "One World," unified in many ways as never before. By some, the growing integration of the world, the increasing dependence of each part on every other part, is welcomed with rejoicing and hope; for others, it raises doubts and misgivings. That the increasing unification of all the peoples on this planet is good and desirable has been too uncritically accepted in many quarters; there are certainly things to be said for the opposite point of view. The question needs more careful analysis and cooler appraisal than it receives.

In what senses has, or can, the world become one? First and most obviously, it has become spatially and temporally unified to a high degree. Modern advances in transportation and communication are the practical equivalent of the shrinkage of the planet's diameter, the levelling of its mountain ranges, the filling of its oceans. This is certainly no unmixed blessing. Although the farthest country is now easily accessible to anyone who can afford an aeroplane ticket, the romance of travel is disappearing along with its difficulties and hardships. Wherever one goes, the airports, the hotels, the streets and the customs are becoming so similar to those at home that the instructive differences of far places are being lost. And, if rapid transportation can bring prompt relief to the sick and the distressed in remote areas, it also carries the diseases of men, animals and plants swiftly over the earth. Nor is life made more pleasant by the assurance that, before we know what is happening, we can be annihilated by a powerful country in another continent. Nearly everywhere men are burdened with heavy taxes to support huge armaments whose effectiveness in shielding them from such destruction is questionable.

From the point of view of communications, the world has become as small as it can be: since a radio message reaches the antipodes almost instantaneously, no further reduction is possible. But to be assailed daily and hourly if one will submit to it, with messages, in large measure unpleasant and disquieting, from every part of the earth, is a very doubtful advantage. On the other hand, when the horse and the sailing vessel were man's most rapid

means of transport, valuable spiritual and practical insights, which always travel more slowly than disturbing news, none the less made their way over great distances. Even the mighty range of the Himalayas and the vast deserts of central Asia did not prevent a fruitful interchange of ideas between India and China, although until quite recently they precluded a massive invasion of one of these countries by the other. From many points of view, this is the ideal situation: a degree of isolation which prevents neighbouring communities or countries from fighting or becoming economically dependent on each other, but does not stop the interchange of their finest insights.

Secondly, the world is becoming economically ever more unified. Countries which not long ago were almost self-sufficient now depend increasingly on selling and buying abroad. This, too, is no unmitigated advantage. If it enables many people to acquire goods hitherto unavailable, it also makes their situation more precarious. If new centres of production grow up in distant lands, the price of a commodity may suddenly drop to the point where it can no longer be marketed profitably, to the great distress of those whose economy is based upon it. International trade makes of every country the potential rival of every other; when a nation engages heavily in it, its prosperity depends, not mainly on the intelligence and industry of its people and the natural wealth of its territory, but on factors beyond its control. Ideally, every country and indeed every community should be economically independent, able to produce what it needs to support its life. To receive luxuries from afar is pleasant; to be dependent on distant regions for vital necessities is perilous and disquieting.

Moreover, one of the most dangerous fallacies of our time is that there is a single economic system, such as that which has grown up in Western Europe and North America, which the whole world may with advantage adopt. It is probable that economic arrangements which are satisfactory in one country are ill suited to another whose people differ in temperament and habits and live in a different environment. And one who contemplates

the manifold evils and unsolved problems which confront the dominant socio-economic systems of the present day will not, if he loves his fellow men, advocate their unlimited extension.

Thirdly, there is the political unification of the world, of which the United Nations Organization is an early step in a movement which may go much farther. A world government strong enough to keep peace among all nations would be a blessing to mankind. On the other hand, this powerful central authority would be a potential threat to the liberties of all mankind. If, as is certainly not impossible, selfish or fanatical men seize control of the world government, it will require more than a Junius Brutus to overthrow the tyranny.

If an effective world government is established, it should be regarded as a temporary arrangement which, if it can preserve peace for a few generations until nations abolish their armaments and lose the habit of settling differences by force, should thereafter be dissolved. Meanwhile, it must be watched with the utmost vigilance by all men everywhere, lest it usurp powers which it was never intended to have and install itself too firmly ever to be dislodged. A world government is too far from the individual and his immediate community to be responsive to his wishes and needs; to have our government close to us increases our feeling of freedom and responsibility. There is much wisdom in Leopold Kohr's contention, in *The Breakdown of Nations*, that the larger countries could with advantage be divided into smaller, more manageable units, whose smaller problems would be within the grasp of human intelligence. At the same time, many of the problems confronting mankind require action on a more than national scale; but these matters should be controlled by regional or global organizations established for specific purposes and with strictly limited authority.

Fourthly the world is becoming one in the sense that we increasingly view men of all races and colours as our brothers and equals. This attitude is far from new, it is as old as Stoicism in the West and a good deal older in the East. But modern historical and ethnological studies have placed it on a more solid empirical foundation, and done much to dispel the ancient,

pertinacious idea that some divisions of mankind are intrinsically superior to the rest, in the sense of being more highly endowed with intelligence, virtue, or strength, or chosen by God for a special mission. The contemplation of the sameness of all men, in origin, nature and destiny, inspires certain people with a sort of mystic exaltation; its growing recognition seems to them the most promising development in the modern world.

In some aspects, the uniformity of mankind has been exaggerated. One might, for example, contest the view that all human races belong to a single biological species. The reason why they are so classified is that all contemporary races of man freely interbreed, producing fertile progeny. But in other divisions of the animal kingdom—birds and insects, for example—individuals which differ from each other far less than Europeans and Amerindians, or Mongolians and Negroes, are placed in different species. Some of these related species are so similar in appearance that only experts can distinguish them, yet they scarcely ever interbreed even when they mingle in the same area. The difference between birds and men, for example, is that the former have, as a rule, very strict, innately determined mating standards, while human standards are extremely flexible. Although it is probable that all mammals, and indeed all vertebrates, are descended from a single, extremely remote, ancestor, it is by no means certain that different branches of mankind are not derived from distinct, although obviously related, species of Primates: so that *Homo Sapiens* is what biologists know as a polyphyletic group.

Although to the biologist this is a problem of great interest, it lacks moral or political importance. What matters is not the stage in evolution at which another creature's ancestors began to diverge from my own, but the relations that actually exist between us. Our true brothers are those with whom we can dwell in sympathy and harmony, whether they be white or black, walk on two feet or four, or even fly through the air. It is far easier to feel brotherly toward many animals than toward men whose character and conduct are repugnant to us. From this point of view, mankind is still far from being one.

The spatio-temporal, economic and

political unifications of the world, so far as they have been achieved, have already brought grave disadvantages no less than benefits; and we cannot view their increase, in the form it now takes, without disquieting thoughts. The brotherhood of all mankind, in the strict biological sense of derivation from a single sub-human ancestor, is probably a myth, and in the spiritual sense it is an aspiration far more than an accomplished fact. Is there, then, no method of bringing mankind together in a unity that will be solid, enduring and beneficent?

The most powerful unifying force that we know is our ideals. Shared ideals draw men together in closest brotherhood, despite differences in age, wealth, race, colour or language. Clashing ideals split men asunder, making enemies of brothers and strangers of neighbours. This is understandable, for our ideals are our highest and most precious possessions, the forerunners of the nobler men that we aspire to become. Without ideals, our vaunted reason hardly raises us above the other animals. They are our compensation for those beautifully integrated patterns of behaviour which they inherit and we have lost.

What ideals are sufficiently high and comprehensive to bind all men together in community of spirit and endeavour? The first that is likely to occur to us is that of universal peace. But this ideal seems to lack force; for men have yearned for peace since ancient times, yet they now make vaster preparations for war than in any earlier epoch. Apparently the reason why the ideal of peace lacks the power to effect its own realization is that peace, in the political although not in the inner spiritual sense, is essentially a negative concept: the absence of armed strife among nations. Peace is not a positive good so much as relief from a great evil. Perhaps we should regard peace, not as a creative ideal, but as the condition necessary for the realization of our truly constructive ideals, whose nature we must now consider.

An ideal that has been growing of late is that all men everywhere should enjoy a high standard of living, by which is meant enough of the necessities of life, with a liberal margin of its luxuries. To wish others to enjoy the benefits that we have or desire is laudable; but an increase in material

comforts does not automatically elevate one's spiritual tone, and in some instances it has just the opposite effect. Until we achieve closer correlation between improvement in the physical conditions of life and growth in spiritual and moral qualities, the ideal of a high standard of living for all men may appear thin and cold to the true idealist. Moreover, under the present economic system, the means for improving standards are obtained largely through competition between individuals and nations. Could we pool the world's resources and then divide them equally among all men, to achieve the high standard of living might become a true unifying endeavour; but this is obviously impracticable. Only in small, homogeneous, archaic communities did the welfare of all the individuals rise and fall together. A money economy seems to make this common sharing of benefits impossible, and the so-called communistic countries have not yet shown us how to overcome the difficulty.

Another ideal that has been gaining ground is that every boy and girl should have all the education that his innate capacity prepares him to receive. If we use the word "education" in its original sense of drawing forth and developing the excellent qualities that are latent within us, this is a worthy goal. If, on the contrary, we understand by "education" merely a technical or literary training which frequently makes the recipient disdainful of manual labour and many necessary occupations, it is a dangerous endeavour. Unfortunately, nearly everywhere education of any kind costs money, and higher education has become appallingly expensive. The means to educate one's children are often acquired in competitive economic pursuits; so that this ideal, like that of the high standard of living, is in present circumstances not truly unitive.

There remains one ideal that holds greater promise for the spiritual unification of mankind than any that we have yet considered: that of preserving the beauty and fruitfulness of the planet on which we dwell and protecting the creatures that share it with us—the ideal that man become "the lord and not the tyrant of the earth." This ideal includes the conservation of natural resources but is more comprehensive. For many conservation means

simply the preservation of the natural foundations of civilization, including the fertility of the soil, the productivity of the forests, the continued flow of the rivers and the like. The importance of this endeavour cannot be exaggerated, yet the more materialistic of the conservationists fail to take cognizance of intangible values which must be recognized by our ideal. It is not merely to assure a continued supply of food, lumber, water-power, and other necessities that we wish to save the natural world from spoilage by man, but also because it is an expression of the creative energy that made us, because it is full of beauty and interest and speaks meaningfully to the contemplative mind. It is not merely because they are links in the chains on which nature's balance depends, or because they provide "sport" for the thoughtless hunter, that we wish to protect animals of many kinds, but because they are sentient beings like ourselves. Thus this ideal includes the ancient and perennially compelling ideal of *ahimsa* or harmlessness; but it is harmlessness widely applied, not only to sentient beings but to the beauty of a landscape, the purity of a river, the integrity of a forest.

This is an ideal that it is hardly possible to pursue selfishly. One may attempt to raise the standard of living of his own family or community, careless of whether his economic manipulations lower that of other families and communities. He may bend all his efforts to provide an education for his son or daughter, no matter how many other children grow up in ignorance. But when one strives, however modestly, to preserve the beauty and fruitfulness of the earth and the lives of the creatures that share it with him, he necessarily aims at benefits that are somewhat widely diffused, not only among his contemporaries but among future generations. To guard the natural world is to display a little of nature's impersonal largess.

Already this is proving a fruitful field for co-operation among nations. An example of this is the recent international effort to prevent the dumping on the high seas of waste petroleum from tankers and other ships. When seafowl heedlessly alight on oily slicks, their feathers stick together; they can no longer fly; they die of starvation and exposure—a tragic fate that each year, in consequence of man's carelessness, overtakes many thousands of beautiful sea

birds. Moreover, the oily wastes are washed upon beaches, making them unfit for bathing, with consequent loss to seaside resorts.

Although this and many similar problems require action on the national and international level, it is a mistake to suppose that they can be solved by governments and organizations alone. Unless the demand for their solution comes from the people, official action will never be successful. Those who cherish this ideal must select the articles they use or consume with some regard to their provenance, refraining from things whose production involves wanton exploitation of land or sea or cruelty to living creatures. Since in the complex modern world it is difficult for the consumer to discover the primary source of all the articles he buys, education and publicity in this matter are urgently needed. Probably many of us daily use articles, innocent enough in appearance, that a conscientious person would never touch if he knew all that their production involves.

This ideal of preserving the beauty and fruitfulness of the earth should appeal to every man capable of broad vision, gratitude to the natural world that supports his life, and unselfish concern for its future prosperity. This ideal, if any, should be capable of uniting mankind in a common endeavour. It provides an excellent field for the practice of international co-operation; for one who is dedicated to it can hardly be suspected of manoeuvring for selfish advantages. By working together on a global scale for the advancement of this ideal, men would develop attitudes, including mutual respect and confidence, that would help them to co-operate more closely in fields from which it is more difficult to exclude all suspicion of selfish scheming. (Courtesy: **The Aryan Path**)

Our sense of private dignity can survive the most oppressive man-despot, but the despotism of law corrodes it.

—Norman Douglas

The roots of education are bitter, but the fruit is sweet.—Aristotle

To pity distress is but human, to relieve it is godlike.—Horace Mann

To be capable of respect is almost as rare as to be worthy of it.—Joubert

Nationalism Has No Future

By ARNOLD TOYNBEE

A great majority of the human race at the present moment nominally adheres to one or other of four old religions: Hinduism, Buddhism, Christianity, Islam. A large part of the minority adheres to other religions of the same age and kind: for instance, Judaism, Zoroastrianism, Jainism, Taoism. But mankind's real religion today is none of these; it is Nationalism, and this means the collective self-worship of some fraction of the human race.

For the time, at any rate, Nationalism has supplanted the nominal religions in fact, though not avowedly. Only Communism has been able to stand up to Nationalism, and this only in non-Communist countries. In Russia and China, Communism has become Nationalism's tool. Trotsky wanted to put Russia to work for international Communism, but Trotsky was defeated by Stalin—and the irony of Stalin's victory was that Stalin was not a Russian by origin. Of course, Georgian Stalin was not the first foreigner to become the leader of a national movement. Corsican Napoleon anticipated him in France, and Austrian Hitler followed him in Germany.

If we want to see the long-drawn-out history of religion replayed at high speed, we can watch this spectacle in Africa. "Something new is always coming out of Africa," said the Romans, but it is as true today as it was 1,800 years ago. A single century has seen religion in Africa pass through a succession of phases: from magic and nature-worship to Islam and Christianity; from these to Nationalism; and, through Nationalism, back towards the pre-Islamic and pre-Christian dispensation.

The Heritage

Nationalism in Africa is determined to be "modern". But modern nationalism cherishes a nation's national heritage from the past. The more peculiar the heritage the better. So long as this national heritage is distinctive it is to be treasured, whether intrinsically good or bad. Nationalist Africa seems inclined to treasure its pre-Christian and pre-Islamic past. It is not easy to make a national religion of Christianity or Islam. The appeal of these two missionary religions is not local but universal. They address themselves to each individual human being that is born into

the world. The objective of each of them is to convert the entire human race, and to make a reality of the brotherhood of man. Neither religion has achieved their identical ideal. Their destiny looks as if it would be co-existence. But both their universalism and their individualism are genuine, and this puts them at loggerheads with Nationalism, since Nationalism's idol is some particular fraction of the human race.

For this reason, Nationalism in Africa tends to look back behind those two world religions to a specifically African past of its own. But which of the competing religions is "the wave of the future?" It is possible that neither Nationalism nor a resuscitated African magic and nature-worship will prove satisfying to human hearts and minds. These have the same spiritual needs in Africa as elsewhere.

The weakness of Islam and Christianity is one that they share with the other "higher religions." In their long journey through time and space they have picked up a mass of accessories that are not only irrelevant but are, in some cases, contradictory to their original messages. This is one of the reasons why they have been losing their hold in recent times.

On the other hand they have a strong point that is lacking in all the post-Christian ideologies—Nationalism, Communism and the rest. The historic higher religions have help and comfort to give to the individual on his way through this life. The way is hard, so the help is precious; and people who, have once had it will not find it easy to do without it. They may be put off by the outer shell that each of the higher religions has acquired; but probably they will still yearn for the spiritual reality within. And, if they can break through the letter and recover the spirit they may yet return to the old religions in some new form.

If the higher religions do, in truth, have something in them that meets the human soul's permanent spiritual needs, then their expectation of life will be longer than that of either the current ideologies or the primitive forms of religion and magic. In fact, we may expect to see the historic higher religions revive, and revive inwardly intact, however great may be the changes in their outer appearance. If Islam and Christianity were to revive in Africa, what would be their respective prospects?

One may perhaps guess that in Africa the winning religion will be one that has the spiritual power to overcome the divisions between nations and races; and in this point Islam has an advantage by which it has already profited. The sense of fraternity is strong enough in Islam to make Muslims of different races willing to intermarry; and inter-marriage is the touchstone of genuine brotherhood. When Asian or North African Muslim missionaries convert Africans in the great region south of the Sahara, what emerges is a single Muslim community. When Western Christian missionaries convert Africans, what emerges is, all too often, a couple of separate communities, each Christian, but one white and the other black.

This is unfortunately the rule in Christendom, and the one outstanding exception to it proves its validity. The Spanish-speaking and Portuguese-speaking Christian peoples seem to be as free from race-feeling as the Muslims are.

In Mexico and in Brazil, there are many races but a single nation, and it is probably no accident that the Spanish and Portuguese Christians should display this Muslim virtue. It looks as if it were a heritage from their Muslim past. Spain and Portugal were under Muslim rule for many centuries.

So long as this virtue is the monopoly of Islam in the greater part of Tropical Africa, Islam is going to increase there and Christianity is going to decrease. The moral for Christianity is that it should reform its practice to bring this into accord with its principles. For, in principle, Christianity, no less than Islam, is a religion for all mankind—a religion that makes no distinction either of persons or of races.

Human Family

The future lies with whatever religion or religions can create the spiritual brotherhood that is mankind's need today. Communism claims to be a sovereign unifier; Islam has been proving itself to be a unifier in Africa; Christianity could play the same role if it could bring itself to live up to its principles. Nationalism, however, stands for division, not for unity, so nationalism really has no future. It may destroy mankind and bury itself in the ruins, but it can do no more than that.

In the Atomic Age we have to choose between two extremes. If we are not to

destroy ourselves we have to learn to live as a single united human family, embracing all mankind without exception. In Africa we can see mankind in epitome. Of all the continents Africa may be the first that will give us a clue to our destiny.

MOUNTAINEERING

Mountaineering, the sport of climbing high mountains for the pleasure of it, has received considerable fillip and aroused keen interest among the youth of India in recent years.

In the absence of proper organisation, training facilities and encouragement, mountaineering had not become widely prevalent until some years ago. The success of Shri Tenzing Norgay, who reached Everest with Sir Edmund Hillary, in 1953 has helped in making climbing popular.

Following that event, the Himalayan Mountaineering Institute was set up at Darjeeling in 1954 to provide basic and advanced training in climbing to young men from different parts of the country. The Prime Minister, Shri Nehru, is Chairman of the Executive Council of the Institute.

In the course of the last six years 500 students, many of the settled in service or profession, have completed training in climbing high mountains at the Institute.

The basic course lasts about 40 days during which students wearing mountain kit trek at altitudes between 15,000 and 20,000 feet. Besides, there are lectures on mountaineering and related subjects including botany, geology and meteorology.

Students who have done well in the basic course are encouraged to undergo the advanced course. This provides them with an opportunity to climb peaks of over 20,000 feet or to explore areas not visited or explored so far.

The training also includes rock climbing, ice and snowcraft, including movement on ice by cutting steps, and climbing with the help of ropes on rock faces and ice walls.

For each course the Institute charges Rs. 400 which covers expenditure on boarding, lodging and training. Deserving students are also given financial assistance.

Mountaineering centres and clubs have also come up at different places to inculcate

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A CRITICISM OF THE THIRD PLAN

By SHRI K. P. GHOSH

The discussion on the Draft Outline of the Third Five-Year Plan shows that economic planning has come to be accepted by all sections of the people as necessary and desirable. It is assumed that planning will continue through changing governments and irrespective of the rise and fall of political parties. The problem now is how planning can be made to play a more intimate part of life for everyone. The fear is that once Nehru has gone, the social purposes of planning might be distorted and the rate of economic advance slowed down. A need is felt for some form of assurance that the characteristics of drive and direction in planning will continue as far into the foreseeable future as possible.

While the mixed economy of India cannot avoid the opposite pulls and stresses as between the public and private sectors, the country is in favour of a greater speed of development in all sectors. No one is satisfied with the rate of progress so far.

Communists, even those friendly to India, usually argue that no real national planning is possible without a centralised and authoritative political party running the country. Our determination is to avoid totalitarianism in any form, even though many of us would like very much to secure the practical advantages, the quick results, of such a system. The conviction is that a properly informed and inspired people could solve all these problems.

The key task is to create a consensus of public opinion on the immediate and irreducible needs of the country and its individual citizens. Urged on by such necessity the planners could set out the required co-operation, organisation, taxes, and sacrifices the nation would have to make.

"Let the people will, and let their will be done" could form the slogan on which the nation would roll up its sleeves.

Directive Policy Commission

In the Draft Outline a large section is given to the consideration of policy and organisation for improvements in administration and for securing greater public participation. Non-official quarters are also full of suggestions for diagnosing and remedying the nation's ills. The most authoritative of these, the Congress Party, has a plan (first mooted in the Ooty seminar in June 1959) to form, together with

other political parties, a National Plan Front to secure public participation in the planned projects.

Many responsible people are now suggesting that a certain degree of compulsion has become necessary. There is also a demand for greater efforts in public relations. Because of the possibility of far-reaching political consequences if either of these measures were to be taken by itself, they are often put forward as though they were mutually contradictory. The intention of this contribution is to combine the two by showing how improved public relations work could itself produce social compulsion without involving the law and the police.

It need hardly be said that the task of informing and inspiring more than four hundred million people calls for a vast organisation. Necessarily, it must be supported by public funds, enjoy the confidence of the Government and major political parties, be headed by people with the reputation of an independent outlook and personal integrity as well as of skill as publicists. The Planning Commission of India itself provides an example of the lines along which such a public relations system could best be built.

It could suitably be named the Information Commission or, to anchor it with the aims of the Constitution, the Directive Policy Commission. It should be a statutory body, like the Planning Commission, independent of the administration and without executive authority, but charged with planning and disseminating information. It should function as a general advisory body to the Central Government and local authorities, the Planning Commission, the universities and schools, and to the newspapers and other media of information. Shri Nehru is undoubtedly the best person to be its chairman, and the National Development Council its directors.

Administrative stability is now as much a matter of course as in any orderly democracy, and there is no longer any need to fear that Shri Nehru's successor, whoever he may be, would have an abnormal situation to cope with. But it would bring great relief to the mass of the people to know that their leaders and governments would have at their side an efficient body ensur-

ng continuity of the purposes outlined in the Constitution.

Any Directive Policy Commission, or whatever such an organisation may be called, is likely in the present state of Indian news distribution to feel there is an urgent need for a high-quality newspaper to function as a national forum. An Indian newspaper with a world outlook, managed by an independent trust, could possibly mitigate the growing disregard of the public interest widely shown today in India by the owners of the press. As the freest of the democracies, India could perhaps set new standards of journalism as statesmanship.

Only experience can show whether it will be necessary to publish public-sector newspapers from the State capitals, too, in competition with the private-sector newspapers, thus expanding the democratic rights of free expression.

Fully and responsibly informed and participating in the planned projects, the people would soon form the consensus of opinion, the compulsive force and sanction for all authority. It can hardly be doubted that a consensus of opinion round the planned economy will also entail a sense of national unity, pressure for an equitable sharing of wealth, and a moral demand for the higher taxes, voluntary labour and sacrifices necessary for the next five to ten years.

Widening the Perspective

A basic realism in Indian planning is the perspective plan which sets out in broad outline the developments to take place in the next fifteen or twenty years. India's expected growth from 1955-56 to 1975-76 was first outlined at the beginning of the Second Five-Year Plan in 1955. Since 1958, the Perspective Planning Division of the Planning Commission has been filling in the details and doing research on which to base continued planning for development—"the long-range view of the general strategy for India's development". They believe that an annual increase rate of 6 per cent in national production is the optimum for India's total resources, and that a doubled national income in 14 years is no bad outlook.

This is sound practical sense, but the other, more imponderable factors should also be taken into account. Once the people have begun to take an active interest,

resources for the plans will be found to gain a tremendous impetus. This has been the secret of overfulfilment of the plans in the Socialist countries, and there is no reason why the same should not be the case in India.

Other factors worth considering are the new sources of power and the developments in technology that are raising production potential faster than ever. For countries under the necessity of leap-frogging the measures taken by the older industrial economies, nuclear energy, jet engines, automation and chemical engineering have opened great new vistas of industrial development. Most of these new aids are still in their infancy, but their application in industry grows by leaps and bounds.

In the last two years or so, with the hastening independence of the African countries, a new spirit of urgency has come into the world. All the backward economies are pressing to catch up as quickly as possible with the advanced ones. But though economic progress is bound to be rather slower at first, the psychological mood is all for break-neck speed. In this context India is expected not only to help those following in her footsteps, but to lead the race as well. This situation is no less real on its economic side than was, and still is, the struggle for freedom on the dependent countries.

Pressures of a different type are also taking shape. Soviet economists hope to reach such abundance in production as to be able to introduce full Communism between the years 1975 and 1980. China aims to surpass Britain within the next ten years. In the United States and Britain, whether the rate of annual increase in national wealth is of the order of three per cent, the belief is growing that in the race with the Soviet Union, these Western powers will step up their productivity to achieve an annual increase rate of four per cent, thus doubling their national wealth by 1975-80. This five-year period of 1975-80 that looks like becoming a focal point towards which every country will have to direct maximum efforts for economic development. The leaders and planners of India need to raise the perspective planning sights, in addition to bringing the Plans closer to the people.

Since the advent of the first **sputnik**, man has entered a new era in human history. As the world grows increasingly

aware of man's place in space and the universe, it is more than likely that poverty, ignorance and other handicaps to the individual's full development will become quite intolerable. Though the date cannot yet be named, it may be nearer than we think, and will follow hard on the heels of man's first flight into space.

India and the other developing countries cannot even attempt to raise to the levels now obtaining in America and Europe the per capita consumption of their population. "Two cars per family" need not be accepted for all countries as a desired standard of living. The first aim beyond a modicum of decent living for all with a net-work of welfare services should be to reach equality in the world race for mastery of the science and technology of our times.

In this field India is within easy reach of the most advanced, and should aim to be in the front line of all intellectual pursuits within the next ten years. In between the two levels—that of civilised though modest living standards and the highest world level in scientific, technological and cultural attainments—Indian society will leave scope for plenty of individual aspiration and achievement.

Stepping up the Targets

It would seem almost axiomatic that some signs of mobilising public opinion for the Third Plan will soon become visible. In their wake should follow a publicity campaign to show the people what they may expect as the perspective plan is unrolled before them. They will look for an enticing and exciting prospect. If they get it, they will be quick to offer their co-operation.

The Third Plan will in its big industrial projects be greatly limited by the amount of foreign assistance India can hope to obtain. But in all fields that do not depend on foreign exchange, such as agriculture, mineral resources, several lines of industrial manufacture, handicraft and the small-scale industries, there is room for enormous expansion.

An example is the production of food-grains. Considering that Indian grain production per acre is at present one of the lowest in the world, and that modern husbandry should enable the Indian peasant to produce as much as four times the present output, the Third Plan target seems unaccountably modest. If there is an all-

out effort, not in words alone, but by increasing irrigation, land reclamation, soil preserving, better supplies of fertiliser, both chemical and organic, and better seed grains, the Plan target could certainly be achieved in three years or even less.

Such a stepping-up of the Plan could also include the production of cotton, sugar-cane, oil seeds, jute, tobacco, fish and milk. In fact quite probably the entire agricultural segment of economy could

VALUE OF TIME

(Continued from page 211)

present or be miserable in it; we can dream about the past or plan hopefully for the future. We can be punctual or dilatory. We can make good use of our time or waste it.

Due regard for time is a mark of efficiency. The more goods we produce in a given time, the more value that time has been to us.

We have realised that "Time will tell"—it can settle doubts and solve many problems. The passing of Time brings many changes. Time helps to establish friendships or love. Time is also a great healer, yet it can destroy as well as create. It is silent, remorseless, inevitable in its passage.

Whatever we may think about Time, and however we use it, we dare not ignore it. It represents invincible power for good or ill—largely depending upon what it means to us and how we use it.

Surely we must realise and remember that Time is indeed a very precious thing—Life itself. Unless we respect Time to this extent, it can't be worth much to us. We need leisure, relaxation, rest, as we need mental and physical exercise. But when we merely "kill time" we are—as it were shortening our own lives. Time, wisely occupied in work and leisure enriches life considerably. If we could imagine an hour glass or an egg-timer filled with gold dust instead of sand, we should more easily be convinced of this vital fact, as we watched the gold dust trickle away. One thing we should never forget. We can turn an hourglass up the other way and let the contents trickle back again. But we cannot do that with Life. Every minute is a "thread of gold" helping us to weave the pattern of Life itself.

(Courtesy: Psychology)

reach the targets in half the time allotted.

In the vast field of the building industry, development could be greatly speeded to meet the demand for housing, at the same time radically cutting down India's painfully wide unemployment. (The sale of houses on instalment payments could soak up much of the additional income that orthodox economists fear might cause inflation).

Existing exports of iron ore and coal could be increased. So also could the already growing exports of diesel engines, sewing machines, bicycles, electric fans, and the like. With the expected exhaustion of sterling holdings in London, very great exertions will no doubt be made in every possible way to increase Indian exports, exceeding the targets of the Third Plan.

In the export field India may find it advisable to supply some capital goods to the emerging African and Asian countries. With some little extra effort, India could, after meeting her own needs, supply complete factories for the production of textiles, sugar, cement and bicycles. There is a demand for these things and the countries wanting them can often pay in foreign currencies.

The Third Plan also aims to extend and improve scientific and technical training, but more could probably be done in these fields too. National institutes should be established for the study of automation and for the application of jet power. Certain aspects of space research (such as the study of cosmic rays) should be given more support, and the building of nuclear power stations speeded up.

More than anything else the Third Plan ought to see to the emergence of new leaders and cadres in all fields. Delegation of authority to village and district panchayats will generate leadership for need is for national leaders and cadres, and local government affairs. But the urgent these will come forth, or be thrown up from field work, only if the people are asked to share in responsibility. The authorities ought seriously to consider bold measures to involve not only university students, but even boys and girls of eleven and twelve, into very wide fields of responsibility in national affairs. It happened during the long struggle for independence, and should do so again in our present far happier and more positive struggle for a good life for our people.

Ultimately it will be the people themselves, with the Government and the Planning Commission providing the details, who must decide just how fast the country should move. But it is perhaps permissible for one of their number to suggest that the rate of development envisaged in the Third Plan ought to be increased by over fifty per cent.

The Plan, which proposes an increase of over five per cent per annum, could be raised to an annual nine per cent. This would double the national income in ten years, and quadruple it in twenty. Indian income per head would even then be much lower than British, American or Russian, but it could at least guarantee a civilised standard of living and reduce the gulf that now separates Indian living from Western or modern standards.

(Courtesy: **AICC Economic Review**)

MOUNTAINEERING

interest in mountain climbing and provide some basic training. Such centres exist at Bombay, Jabalpur and Saugor apart from mountaineering clubs in some Universities.

Over a dozen completely Indian expeditions have been organised in the last seven years. Most of them achieved their objectives. These include the climbing of peaks which had not been reached previously.

Among the successful expeditions have been those to Cho Oyu (26,867 feet), Kamet (25,447 feet) and Panch-Chuli (22,656 feet). Some of the other expeditions were to Sakang (24,150 feet) and Chowkhamba (23,420 feet).

In the spring and summer of 1960, a 20-man Indian team led by Brig. Gian Singh, Principal of the Himalayan Mountaineering Institute, went on an expedition to Everest.

Three members of the expedition Nawang Gombu, Sonam Gyatso and Narendra Kumar, went up as high as 28,300 feet—700 feet short of the peak, where they were beaten back by unusually bad weather.

Most of the equipment used and carried by members of the expedition was indigenously made. Many of the items were manufactured in the ordnance factories and a few by private firms. The indigenous equipment included wind proof jackets and trousers, ice-axes, wire ladders, climbing, marching and hunter boots and high-altitude stoves.

AFRICA IN 1960

By COLIN LEGUM
Of The "Observer", London

Looking back at the momentous past year, the outstanding fact is not the Congo disaster which overshadowed the African scene, but that the greater part of the continent peacefully and confidently achieved its independence, and that road-blocks were cleared for most of the remaining colonial territories to follow suit.

It is unfortunate that bad news so often drives out the good, so that the blurred impression left on the public mind is that of a continent in trouble. Nothing could be more misleading.

Africa, like every other continent, has its difficulties and its trouble-spots; what must one expect from a continent that in a single year has advanced more rapidly than any other continent in history? The surprising thing is that the process of decolonialization is proceeding so smoothly and efficiently.

The achievements in 1960 can be told in a few figures. The year started with only 10 independent African States, holding a total population of 96,000,000; by the year's end there were 27 independent countries with a population of 178,000,000.

I am less impressed, however, by these overall figures than by the actual achievements of many of the new nations. The outstanding example is undoubtedly Nigeria. No country in Africa is so vast and diverse. Yet at her moment of independence, the Nigerian leaders achieved a unity and harmony that is, so far as I know, without parallel in a country as complex as theirs.

With the formidable "Zik"—Dr. Nnamdi Azikiwe—as Governor-General, the tough but cautious Alhaji Sir Abubakar Tafawa Balewa as Prime Minister, and the trenchant Chief Obafemi Awolowo as Leader of the Opposition, Nigeria offers the complete answer to the Jeremiahs who lament the passing of colonialism.

The emancipation of 32,000,000 Africans in the French-speaking Community also took place without serious internal difficulties in any of the 14 countries which became independent. The unfortunate internecine struggle in the Cameroons Republic was a heritage of earlier times; and the rupture in the Mali Federation between Senegal and Soudan fortunately did not

seriously jeopardize the political set-up of either of the two States.

Despite the gloomy forebodings of pessimists, 3,000,000 Somalis from the former British and Italian protectorates achieved their new unity with considerable goodwill and commendable flexibility.

Thus, of the African States which came to independence in 1960, only one—the former Belgian Congo—failed to make the grade at the first attempt.

Kenya and Tanganyika

Among other notable advances I would select especially Kenya and Tanganyika. In the latter case we have an example of a poor but determined country, admirably led by Mr. Julius Nyerere, and its winning of a large measure of internal self-government and putting itself well on the road to independence.

But the most sensational breakthrough came in Kenya, one of the most troubled of all colonies. With the decision that political power will ultimately be transferred into the hands of elected African leaders, Kenya has at long last turned its back on an impasse which has caused so much bitterness in the past.

One of the obstacles in East Africa to creating a powerful new independent federation is the reluctance of the traditionalist-minded Buganda Government to come to terms with the rest of Uganda. But although its internal crisis has not yet been finally resolved, the firm policies of the Colonial Secretary, Mr. Iain Macleod, in resisting any attempt at "Balkanizing" Uganda looks like winning widespread support not only in that protectorate, but throughout East Africa as well.

Central Africa

Finally, in Central Africa a start has been made on tackling the awkward realities of the Federation of Rhodesia and Nyasaland as it now exists. Here the statesmanlike Monckton commission blew a gale of fresh air through long-standing controversies and clarified fundamental problems.

Nyasaland has already started on a new path with the probability of an elected African majority in the legislature. And
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A MANNED ISLAND IN OUTER SPACE

By N. Varvarov

Leaving behind bright white streaks in the sky like meteors, the three space ships have vanished into the air. Two days later we shall see on our TV screens the Earth's 'envoys' stepping down on the Moon's surface.

After a short stay on the Moon, the explorers will come back to the home planet. Then will follow flights to Mars, Venus, the more remote planets of the solar system and, indeed, beyond its boundaries.

This is indeed what we visualise for the future. At present however technical difficulties still stand in the way of manned flight in outer space. The main difficulty is that space ships must of necessity be of huge size, have extremely powerful rocket motors developing millions of horsepower, and an awesome supply of fuel.

This is what follows from calculations:

A space ship flying a lunar trajectory must have a velocity of slightly less than 11.2 kilometres per second. Once it is within the gravitational sphere of the Moon, the ship will "fall" on to it at the rate of 3.3 kilometres per second. To make the landing safe, this speed has to be reduced. Since there is no atmosphere on the Moon, this can be achieved only by means of retro-rockets. In taking off from the Moon, on its return journey, the ship will have to pick up a velocity of 2.4 kilometres per second in order to overcome the Moon's pull of gravity. As it reaches closer to the Earth, its speed will be increased to a bit less than 11.2 kilometres per second. This velocity will also have to be reduced in landing. On the Earth this can be done by using the terrestrial atmosphere. Then, the minimum aggregate velocity for a round trip to the Moon must be 17 kilometres per second. This velocity in fact determines the supply of fuel the space ship must carry.

The higher the velocity, the larger will be the required supply of fuel. In case the braking is partly done by the rocket engines, the minimum aggregate velocity will go up to about 20 kilometres per second. A round trip to Mars will call for 30 kilometres per second. If the ship's payload is 10 tons, the overall weight of a lunar ship burning a chemical fuel, with the speed of the rocket exhaust of 4 kilo-

metres per second, will be about 10,000 tons. For a trip to Mars under the same conditions, the ship will have to be as heavy as 180,000 tons. Even if the ship is propelled by the best chemical fuel with a rocket exhaust speed of 5 kilometres per second, a lunar ship will tip the scales at not less than 3,000 tons, and a Martian one at over 25,000 tons. It is obvious that space engineering today cannot yet build such ships.

Feasible Plan

These difficulties were envisaged by the Russian scientist K. Tsiolkovsky, a pioneer of space flight. In his work, "Research into Outer Space with Rocket Devices," he outlined a feasible plan to overcome them:

"We can conquer the solar system by simple tactics. Let us solve the easiest task at first by setting up a space community near the Earth as its satellite. . . . We'll settle there and, having a reliable and safe base, we shall be able to vary the speed more conveniently, we shall be able to move away from the Earth and Sun, and, indeed, to travel about at will. . . ."

As Tsiolkovsky believed, an interplanetary station ought to be built and tested on the ground and then shipped in separate parts by ferry rockets to the desired altitude, where the astronauts would assemble it into a single structure, well adapted to house people and equipment for a long time. The station could also carry various laboratories and launching sites for interplanetary ships.

The station will not suffer from lack of power. Photo-electric and thermo-electric cells will convert the flux of solar radiation into electricity. The supply of power will be sufficient for the continuous functioning of scientific equipment. On top of this, solar heat will be utilized for everyday needs—to heat the residential quarters, to grow vegetables, fruits and other food-stuffs for the station's crew and for providing essential services.

'Ethereal' Station

It is from such an 'ethereal' (in Tsiolkovsky's words) station that the first interplanetary expedition will start out on its voyage.

The Soviet space explorers follow in the foot-steps of Tsiolkovsky, the founder

of scientific astronautics. In their opinion, heavy space vehicles provide the key to the problem of space travel. The heavy space vehicles launched by the Soviet Union have advanced the day when an interplanetary station would be built in space.

The flight from the Earth to an interplanetary station will radically differ from travel in interplanetary space. This is why there will be a fundamental difference in the design of the space ship used in either case. The ships intended to fly from the Earth to the satellite will be streamlined, for they will have to overcome the drag of the terrestrial atmosphere. Deep-space liners can be of any shape, for they will not have to face atmospheric friction. They will be built on board an interplanetary station; they can be made lighter, more compact, with the residential quarters arranged in such a manner as to minimise meteoritic hazard.

Ion Rocket Engines

In the take-off from the ground, the thrust of a space ship must exceed its weight. On the other hand, space vehicles travelling between artificial satellites will require much weaker rockets. This holds out great promise for using ion rocket engines, which have low thrust but which squirt out the exhaust jet with a speed of tens and even hundreds of kilometres per second, making it possible to reduce the supply of fuel to an appreciable extent.

Now, a few words about the duration of interplanetary travel. In case the initial velocity of a space vehicle is 12 kilometres per second, a trip to Venus and Mars will take 146 and 259 days, respectively. The ship will have to stay for 470 days on Venus and for 456 days on Mars, waiting for the planets to take a position relative to the Earth which would permit the return flight. In all, a round trip to Venus would take about two years, and to Mars about three years. Of course, no ship will be able to carry all the supplies necessary for an expedition like that. Besides, the crew of a single ship will perish in case something goes seriously wrong. That is why space flights will probably be made by several ships at a time.

Structure Without Foundation

To sum up, heavy artificial Earth satellites will serve as a springboard for deep-

space ship to start out on voyages into the infinite expanses of the universe to explore other worlds. A very important point to be borne in mind is that the construction of such a "structure without foundation" unheard-of in building practice will involve extremely complicated scientific and engineering problems and huge expenses.

We believe that all these difficulties will be overcome before long in a victorious advance of human society on the road of progress.

Campus Life

(Continued from page 213)

cent youth who comes fresh to the University imbibes a good deal of pleasure from the sex episodes on the screen. He too wants to be a Romeo and find his Juliet on the campus if it is a co-educational University. Knowing this background it should be easy to understand the complaints about the behaviour of men students towards women students.

A University campus is a small world in itself. Teachers and students from different parts of the country—sometimes from outside the country—come to live together. The residents on the campus, particularly the students, would not be unaware of the world trends. The cold war between two powerful blocs on ideological grounds would have its repercussions on the student world particularly if they too are ideologically divided. The students in Japan and Turkey for instance have been victims of this state of affairs. The unrest among the Indian students is also symptomatic of the age. Till social conditions are better and life is more secure this unrest will show itself in one form or another. To blame the Universities always for the student indiscipline is not to recognise this social malaise brought about by conditions over which Universities have no control.

Discourage litigation. Persuade your neighbours to compromise whenever you can. . . As a peace-maker a lawyer has a superior opportunity of being a good man. There will still be business enough.

—Abraham Lincoln

* * *

Love your enemies, for they tell you your faults.—Benjamin Franklin

Laos—The Land And Its People

By S. Z. HASAN

The current spectacular political developments in the strife-torn South East Asia have once again brought the little Laos in the limelight.

With an area of 91,500 square miles and a population of one and a half million, Laos is one of the four independent states which once constituted France's Indo-Chinese Empire.

Geography has played an important role in shaping the history of the country. Bordered by China on the north-Burma and Thailand on the west, Cambodia on the south and by two Vietnams—two-thirds by North Vietnam (Communist) and one-third by South Vietnam (pro-Western)—on the east, Laos has, almost throughout her 1400-year-old troubled history, been a victim of the ambitions of the powerful kingdoms which rose and fell around her. Still there is no peace for Laos, for this landlocked, underdeveloped and little-known kingdom is simultaneously subjected to three pressures—communist, western and neutral.

While the ancient history of the country is lost in the mist of the past, it was, before the advent of the Thais, inhabited by the primitive tribes, Mois, Meos and others who constitute one-third of the population.

Emigrating from Indonesia, Mois, a hardy, semi-savage people settled in Indo-China sometime in remote antiquity. They live in the forest-clad highlands of Laos and Vietnam where they were pushed centuries ago by the Thais. Mois are excellent hunters and their region is the hunter's paradise where tigers, leopards, elephants, wild buffalo, deer and other games roam. They are particularly famed as elephant hunters. Many of these tribesmen eke out their living by capturing and domesticating young elephants. Mois are essentially agriculturists and use primitive methods to grow rice.

Most of the Mois wear nothing above their waists and very little below. But on account of the altitude of the plateau men on cool mornings keep their blankets wrapped around their shoulders. Their womenfolk adorn themselves in striped knee length skirts, blouses, plenty of beads around their necks and coils of brass wire hanging from pendulous slit earlobes.

Matriarchal system prevails among certain clans of the Moi. The women of these clans are the leaders of the family; the property is at their disposition, they care for the family, make purchases, and otherwise hold the purse strings. Men show them respect, and if they want to drink rice, wine or buy anything they must obtain permission from their wives. Fortunately, the wives are generous. However, if they grow too impervious, the husbands may assert themselves.

At sacrificial feasts women drink the rice wine first and are followed by daughters and grand-daughters in turn, and next come men and boys.

Because there are more men than women in the tribe, brides also are in a good position to bargain. The proposal for marriage is made by girls. If a girl likes or falls in love with a boy, she asks the permission of the head of her family to seek him in marriage. If the permission is granted, she, accompanied by a witness, proceeds to his house with betel and cakes. If he agrees to her proposal and tastes the gift their betrothal is announced.

When a marriage takes place in the Rade clan, the bridegroom goes to live with the wife's family and his parents are paid an agreed amount to recompense them for the loss of an important member of their household.

Among the Moi clans man does the wooing, offers presents to the girl of his liking and pays the wedding sum to his wife's parents.

The Mois are animists. The tribal priestesses make sacrifices to various gods—god of the soil, god of weather, etc. and offer expiatory prayers. They build tiny shrines in honour of their gods, besides the paths leading to their villages, and in other ways one sees that the spirits rule the lives of the Mois.

The Meo, whose women wear 'sailor collars', though far from the sea, are another important tribe of Laos. Chinese in origin, the Meos are divided into several groups, the black, white, red and flowery, according to the type of the dress worn by their womenfolk. Besides the sailor collar, a Meo girl wears a short skirt and a wide hat, which is built up of layer after

layer of braid until it stands out, pancake flat, around the head. Silver rings dangle from her ear-lobes and numerous silver necklaces, which may total more than half a seer in weight, adorn her neck. These are the Meo woman's bank account. The bashful, gaily attired women-folk and the Meo men dancing in dervishlike whirls to the plaintive tunes of bamboo piped 'kans' provide a pleasant sight.

In isolated tribal villages the people live at home and till their crops of maize, buck wheat, potatoes, and sometimes opium poppies in forest slashings. Some of their crude huts are built on stilts for protection from the poisonous reptiles and beasts; other rest on earthen floors.

Thais, who migrated from Southern China after their kingdoms were broken up by Kublai Khan, form two-thirds of the total population of Laos. They are members of extensive Thai race, to which also belong the Siamese. Cambodians and the Shans of Burma. Some four million Thais still live in their original home.

Following the customs of the primitive tribes, different groups of Thais are also known by the colour of the costumes worn by their womenfolk. There are white Thais and Black Thais. Laos has Red Thais, too, but they are not communists.

The Kingdom of Nam Tchao founded in 713 A.D., was the first independent Laotian Kingdom. At the end of the 18th century the Siamese conquered most of the southern part of Laos, while the Kingdom of Annam (Vietnam) annexed the south-eastern part of the country. The Kingdom of Luang Prabang in the Northern Laos, however, maintained its independence, but it had to pay tribute to Annam from 1830. In 1893, the French, who had already hoisted their flag in Annam, conquered the Siamese-held Laos, and in 1904 they established their protectorate over the kingdom of Luang Prabang as well. On March 9, 1943, Japan took over control of the whole of Laos and on April 15, 1945, a Laotian Government under the Japanese protection came into being. Laos continued to enjoy freedom even after the surrender of Japan in August, 1945.

The French, however, re-occupied the country in April, 1946. By the Treaty of July 19, 1949, Laos was made a self-governing state within the French Union, but the French army continued to use her territory

in its drive against the Viet-Minh nationalists, who were led by Dr. Ho Chi Minh. The free Laotian Government was formed with King Sisavong-vong of Luang Prabang dynasty as its constitutional head and Prince Souvanna Phouma of the royal house of Vientiane as its Prime Minister. But owing to the presence of the French forces on the Laotian soil and King's pro-French attitude Prince Souphanon Vong, brother of Prince Souvanna Phouma, refused to recognise this government and with the help of the Viet-Minh, organised a Free Laos (known as Pathet Lao). With their base in North Vietnam, which was held by the Viet-Minh, the fighting units of the Pathet Lao carried out a number of successful raids into Laos and gained control over two north-eastern provinces.

The International Armistice Commission constituted under the chairmanship of India in terms of the Geneva Agreement of July, 1954, persuaded the warring factions to settle their differences through peaceful negotiations. The French forces left the country and the Pathet Lao troops, which had reached within 12 miles of Luang Prabang, withdrew to the two north-eastern provinces. The Government of Laos promised to hold free and fair elections and declared not to join any military alliance or give bases to foreign military forces. Two representatives of the Pathet Lao were also included in the Cabinet.

After the elections of May, 1958, conditions began to deteriorate again. Prince Souvanna Phouma failed to form a government and resigned. M. Phoui Sanani Kone, who formed the new government with the help of the right-wing parties totally excluded the representatives of the Pathet Lao. Later, he tried to integrate the two remaining battalions of the Pathet Lao. This led to the renewal of the hostilities. There were charges and counter-charges made by the Laotian Government and its communist neighbours.

After a verbal dual between the Soviet Russia and the Western countries at the United Nations headquarters and appointment of a fact-finding sub-committee by the Security Council the situation eased temporarily.

The uneasy peace in Laos has again been disturbed and civil war is raging in the country. The current troubles of Laos stem from the fears of the local pro-French

munist Pathet Lao and of its Communist neighbours that the pro-western Laotian Government is turning the country into an American military base. The U.S.A. is pouring millions of dollars into Laos to keep it out of the Communist fold.

The situation in Laos is extremely dangerous and may ignite the flames of a global conflict. It is high time that the big powers acted wisely and saved the humanity from destruction.

Laos is a land of high hills and low steppes. Its northern region has mountains with peaks as high as 6,500 feet and deep river valleys, which abound in teak forests. The low-lying areas of the south is mainly used for rearing cattle. The timber is floated down the mighty Mekong river to Saigon, the capital and seaport of South Vietnam for export. Originating in the snow-covered mountains of China, the Mekong forms country's natural boundary with Burma and Thailand and provides an important means of communication.

Agriculture is the mainstay of the population. The Laotian peasants produce 7,00,000 tons of rice and large quantities of maize to meet the home consumption. Oil-seeds, tea, rubber and sugarcane are also produced. Opium is perhaps the most prized crop, which is a major source of income.

Country's rich mineral deposits are mostly unexploited. Partially tapped mines in Laos yield 1200-2000 tons of ore per annum.

The underpopulated Laos possesses vast natural wealth, it is extremely backward. Frequent external intrusions and internal dissensions have prevented the development of the country. When peace returns to Laos the first and foremost task before its stable government, would be to develop the country economically through its own inexhaustible resources.

Bulk of the population follows Buddhism. Laotian Buddhists belong to the Hinayana or Little Vehicle sect. Most of their men serve in monasteries for a part of their lives.

Laotian lads and lasses celebrate an interesting festival known as 'love court'. Carrying a showy structure of silver-paper and proceeded by dancers and flower-bearers, then young men parade around a raised platform, decorated with flags and fronds, while the gaily attired girls sit in a row.

Soon they will kneel before a row of bashful maidens wearing embroidered skirts and multi-coloured scarfs. The ceremony, which is held in a moonlit night, is the subject for a poem.

Marriage in Laos is held in a simple and unostentatious way.

Yet in contrast with the simplicity observed in matrimonial matters, the funeral ceremony in the country is a costly affair, because, like their Indo-Chinese neighbours, the Laotians show great honour to their dead. Elaborate preparations are made on the cremation day. The funeral rites start with a great feast. Then the funeral procession sets out amid scenes of great pomp and pageantry. The body is carried in a well-decorated and gaily coloured catafalque, with music playing all the way. The special mourners in snow-white costume and priests in saffron-coloured robes walk at the head of the procession.

Laos has two capitals. Vientiane is the administrative capital where the National Assembly (consisting of 59 elected members) meets and the Government functions, whereas the royal seat is at Luang Prabang where the king presides. Situated on the eastern bank of the Mekong River, both Vientiane and Luang Prabang are quiet temple towns, and the people seem to enjoy idyllic lives, wanting little beyond that provided by a bountiful nature. The biggest traffic jam Luang Prabang knows is when the palace elephants march to the river to take their daily baths or pause before a temple to be fed with bundles of grass and have incantations whispered into their ears.

Laos, like other Indo-Chinese states, is a mosaic of Indian and Chinese cultures. The Laotians have racial ties with China but India is their cultural parent.

Indo-Laotian links date from the beginning of the Christian era. By the end of the second century B.C. the Indian migrants established their colonies in Thailand, Cambodia and Cochin-China (South Vietnam). Gradually their culture began to flow in other parts of South-East Asia, including Laos. Today the Indian influence may be seen in the Laotian religion and philosophy, arts and architecture.

(Courtesy: The Hindustan Standard)

Character is the governing element of life, and is above genius.

—Frederick Saunders

FOOD PROSPECTS—1961

By A. M. THOMAS

Deputy Minister for Food, Government of India

India is closing the Second Plan period with a food situation that can be described as the best in several years. Increased production in a number of areas, brighter crop prospects for 1961, judicious distribution of foodgrains and sizeable imports have enabled the Government of India to meet the demands of deficit States and also to build up large stocks.

In the matter of prices too, the general pattern at the time of writing is dominated by a significant and continuing decline in the price of rice and a "comfortable" position in regard to wheat. Since the second week of August, 1960, the all-India rice index has been falling in spite of damage to standing kharif crops in some parts of the country by adverse weather conditions. Brighter crop prospects and more effective market supplies in recent weeks have been largely responsible for this situation. First reports indicate that despite floods and drought in certain areas the production of foodgrains in 1960-61 is likely to exceed the 1958-59 level of 75 million tons.

Buffer Stocks

While the nation marches to its goal of self-sufficiency in food, the need for creating buffer stocks both from internal production and imports is imperative. These reserves are needed to provide emergency relief, to prevent excessive price fluctuations by maintaining an even flow of supplies in the face of unpredicted crop failures and for allowing "elbow room" against inflationary pressures arising out of economic developments.

While stocks with the Government today are the highest in the last ten years, a reserve of five million tons, including a million ton of rice, is being built up. These factors together with the import programme are such as to create confidence on the food "front".

Last year, the Government of India were able to meet practically all the demands of the States. The way in which threatened shortages in some States like West Bengal and U.P. were forestalled demonstrated the Government's ability to come to the rescue of any State that might develop a so-called food problem.

In the case of West Bengal, there was singular absence of agitation on the food

"front". Quick distribution, at fair prices, of rice and wheat helped to defeat the familiar cry of shortage of foodgrains and the consequent rise in prices. Supplies were readily available mainly as a result of the working of the Eastern Rice Zone. While prices in West Bengal were brought down and kept at a level appreciably below those of the previous year, cultivators in the surplus State of Orissa were able to obtain a better price for their produce.

Restrictions on the movement of wheat and rice in the Western Zone have been lifted and the surplus of Madhya Pradesh is now finding market in Gujarat and Maharashtra. Thus the farmer in Madhya Pradesh gets a better price for his produce while the consumer in the other two States can get foodgrains at reasonable prices.

In Uttar Pradesh, another region of considerable food agitation in the past, conditions today are markedly easy. The withdrawal by the State Government some time ago of the Wheat Levy Order, removing all restrictions on movement within the State, is symptomatic of the good stock position.

The Central Government was able to meet in full the demand from Kerala, another heavily deficit State. Kerala received from Central stocks last year 206,000 tons of rice as against 1,23,000 tons in 1959.

The supply of imported wheat to roller flour mills in the country was further liberalised. The mills were permitted to draw supplies from Central stocks up to their maximum grinding capacity. Supplies of rice and wheat to State Governments from Central stocks in 1960 (up to November) amounted to 694 thousand tons and 1176 thousand tons respectively.

Imports

The most significant feature of the import programme was the signing in May last of the 17 million-ton grain deal. It was signed in Washington by the Food and Agriculture Minister, Shri S. K. Patil, on behalf of India, and President Eisenhower, on behalf of the United States. The agreement, which covers a period of four years, from 1960-64, envisages the import of 16 million metric tons of wheat and one million metric ton of rice. The total value of the transaction is over Rs. 607 crores.

This is the first agreement designed to help in establishing a substantial reserve of foodgrains. One-fourth of the total quantity of wheat, namely four million metric tons, and the entire quantity of rice is intended for this purpose, thus making it possible to have a reserve of five million tons of foodgrains. Shipments under this deal are in progress.

Substantial quantities of foodgrains were also received last year under earlier P.L. 480 agreements with the U.S.A. and from Canada, Burma and the U.A.R.

These large imports do not by themselves provide a solution to India's food problem. Advantage has to be taken of the respite afforded by these supplies to concentrate on the stepping up of foodgrains production within the country itself.

Increased internal production and large imports, particularly for the purpose of building a big reserve, necessitate the construction of extensive storage accommodation. While the storage accommodation of over two million tons now available with the Government is sufficient to meet current needs, steps are being taken to raise this capacity speedily.

Subsidiary Foods

The exclusive use of certain foodgrains by the people of certain areas tends to create problems of shortage. One of the methods of obviating this is to popularise the use of other foodgrains. Attempts are being made to modify the food habits of the people so as to make them rely less on traditional foods. Thus in rice-eating areas, wheat and other cereals are being introduced and made popular. In the South, for example, wheat is now used on a fairly large scale; so also some other cereals like bajra.

The average diet of an Indian, to which ever region he belongs, contains too much cereal. Scientific research has revealed that such a diet is unbalanced and lacks in proper nutritional value. The problem of a balanced diet is being tackled at different centres, particularly at the Central Food Technological Research Institute in Mysore. Healthy substitutes for cereals have been developed from tuber crops like potatoes, sweet potatoes and tapioca which are cheap and easy to grow. These tubers yield far more calories per acre than cereals. The Institute has developed a nutritive flour

from tapioca which can be mixed with wheat flour and groundnut flour to replace atta. Edible groundnut cake and flour are also being produced to provide protein food. Greater supplies of fresh fish and fruits are also being made available.

Though much has been achieved, much still remains to be done to wean the average man and woman away from a diet loaded with cereals to one that is better balanced. By means of persistent campaign throughout the country—through education and demonstration—the health of countless millions is being safeguarded by utilising subsidiary foods.

Africa In 1960

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Northern Rhodesia looks like achieving similarly satisfactory result. The most difficult problem still remains, Southern Rhodesia, but there again the year ended with an important agreement between the Prime Minister, Sir Edgar Whitehead, and the nationalist leader, Mr. Joshua Nkomo to meet round a table with other parties to discuss a new constitution.

Seen in this wider perspective—with the failures set against the advances—there is little doubt that future historians will treat 1960 as a decisive turning-point in the fortunes of Africa. How can they do other wise when, by the year's end, Africa has won for itself the right to more than a quarter of the seats in the United Nations. And there will be more next year.

The vital air of friendship is composed of confidence. Friendship perishes in proportion as this air diminishes.

—Joseph Rou

* * *

True charity is the desire to be useful to others without thought of recompense.

—Swedenbor

* * *

While I would fain have some tincture of all the virtues, there is no quality I would rather have, and be thought to have, than gratitude. For it is not only the greatest virtue, but even the mother of all the rest.—Cicero

* * *

To a sensible man, there is no such thing as chance.—Ludwig Tieck

The Art Of Writing

By Prof. Sasi Bhushan Das

In writing something, we translate our thoughts and feelings into language. The language is, thus, a symbolic expression of our thoughts and feelings. All of us more or less, write something even though it might be a letter. But all of us are not aware of the process involved in writing. How does a writer do his job,—is a question which is not easy to answer. The meaning of the question is, how he produces his work, be it a poem or a play, a novel or a story, a travelogue or an essay. The individual writer when asked, will answer the question in his own way mainly basing his thoughts on the process of his own writing. This process of writing may differ with the individual writer and the nature of the work; and the result will be number of methods. Yet among all this variety, there must be something common, some norm, which might be regarded for all practical purposes as the art or process of writing.

And even when an individual writer gives an account of his own method of writing, his account in spite of his personal bias, will invariably bear an evidence of that common method or art of writing. But the nature of that process, however, has not been finally established. For the theory of the art of writing as given by the psychologists, is based on the insufficient data obtained from the widely differing accounts of the individual writers. Our imperfect knowledge of the working of the human mind in the creative process is another great factor that accounts for the tentative character of the theory. Even if we grant that psychology could give us a perfect theory of writing, it is doubtful, whether a mere possession of that knowledge, would enable one to be a good writer. In short, a theory of the art of writing, cannot, at any rate, teach one how to write. The knowledge of the process involved in writing is one thing, and writing is another.

Even a writer's account of his own process, if ever he condescends to give one, will suffer from an incompleteness for the simple reason that it can record only such aspects of the process as appear on the surface of his mind, but of those intricate and subtle thought processes that take place behind his consciousness, it can record nothing. This warning is necessary. For we can see that an element of inscrutable mystery must

always be there in any account of this kind. Even a writer cannot tell you how to write. At best, he can tell you how he writes. More often than not he feels reluctant to disclose the secret of the private workshop of his craft. But curiously enough, of the deeper or top secret of his craft he himself is, as we have seen, unaware.

The art of writing is a complex process made all the more complex because it involves the co-operation of two processes or the operation of the two aspects of the same process, viz., the process of thinking and that of expressing the thought. The second requires a good command of the language and its vocabulary. A defect either in thought or in expression or in both gives but unsatisfactory results. Muddled thinking leads invariably to obscure expressions and a deficient command of the language again offers a stiff resistance to a clear exposition of the thought. That is to say, the current of thought does not pass freely through an expression that is defective. But a mere possession of the two gifts, of thinking clearly and expressing clearly, is not a condition enough for the birth of a poem, an essay or any kind of composition. A favourable mood there must be to facilitate the mating of the gifts. A happy conjunction of these three factors is rarely achieved. That is perhaps the reason why even the best of writers cannot write at any time he wants to. For though he may be richly endowed with the power to think and the power to express his thoughts, he may not always have the mood to translate his thinking into writing. And what makes it all the more difficult for him is that he cannot command that mood at will. It is somewhat capricious and unpredictable. Common people like myself who make no pretentious claim to the rank of writers also feel this mood to be important in writing something. As for myself I feel that I cannot write anything whatever unless the mood is on: and when the fit seizes me, I take the pen, lay hold on any piece of paper I might get at the time and scribble the first quantum of thought that might flash across my mind at that time. But if no such scrap of paper is available at the time and if the thought that presents itself is of value to me, I mentally carry the thought

and its expression and mutter the same a few times to myself till the expression is somewhat improved and retained in the memory. When I get back home, I jot it down in a piece of paper. Some leisure, a receptive and peaceful mind and a quiet mood are normally found to be the conditions favourable to the advent of thoughts and their expressions through the medium of the language. No other enemy is greater to the advent of thoughts than a disturbed condition of the mind.

Why does a writer write? To this question different writers will possibly give different answers. But a simple, common answer to which the writers in general are not likely to disagree, is this. A poet sang that he sings because he must. Similarly a writer may also write that he writes because he must. Like Coleridge's *Ancient Mariner* he is seized with an irresistible desire to unburden his mind, to tell the tale of his voyage on the uncharted seas of the mind. For the writer, writing is a means of catharsis for his overcharged mind, catharsis not of the Aristotelean emotions of pity and fear but of his own individual emotions, feelings, and thoughts that constantly clamour for an outlet, for an expression. And the writer feels greatly relieved when he can unburden his mind in his writings. A writer writes, firstly, because he feels a strong inner urge for self-expression, which finds satisfaction in his writing, secondly, because his writing provides him with a catharsis or purgation for his pent up emotions and thoughts, with a consequent emotional relief, and thirdly, because he gets in his writing an escape from the painful realities of life. Besides these, in some cases, the writing may bring for the writer some money and social recognition as well.

Writer's Freedom

In the choice of his subjects as in his treatment of them a writer should enjoy a freedom and follow his own instinct. Such a freedom will give the writer a scope for the unhampered expression of his personality. Virginia Woolf suggested that in reading, a reader should enjoy a freedom in his choice of books and not be guided by any authority. I see no reason why this freedom should not be extended more appropriately to writing as well. In writing, a writer should follow his own method of whatever worth it might be, without any

external guidance of any authority whatever. The method should evolve from within his mind and be the expression of his inner self. The more intimate is the relation between this inner self and the outward expression, the greater the degree of perfection a writer is expected to attain in his writings. This perfect expression of the self in writing, is what we should mean by the saying, 'the style is the man.'

What we primarily demand of a writer is not that he should say what he feels and thinks to be right, but that he should rightly say what he feels and thinks. It is this rightness of expression he can add further the rare gift of the rightness of feelings and thoughts, then as a writer he becomes great indeed! We sometimes say that a writer should be sincere. If in writing this sincerity means anything, it should primarily mean this perfect correspondence of the expression to the thought and the feeling.

Choice of Subjects

A writer can write about any subject under the sun, provided, it provokes his interest; and, he is often at his best in a subject with which he is at home. For a subject which does not awaken his interest will not obviously awaken his thoughts and feelings which constitute the materials of his writing. The more varied and wider are his interests, the wider will be the appeal of his writings. The secret of all great writings that have won the universal applause of mankind is that they touch the human life at many points. The plays of Shakespeare, for instance, have a universal appeal because they embrace the varied interests of human life. The universal appeal of Tagore's lyrics lies precisely in the fact that they strike the infinitely varied and the infinitely subtle chords of the human mind, that they stir the human soul to its profoundest depths. But the interests, of whatever nature they are, must be infused with the charm of the writer's personality, before they can be made to make any appeal to others.

A writer becomes an artist, and his writing an art when he succeeds in communicating to his readers the charm of his personality, by bringing his individual mind to bear upon his subject. But individuality in writing is not eccentricity, which is a perversion of individuality and is unlikely to be shared by others. A writer can deal

with his personal feelings and thoughts or even his private emotions, as a poet does in his lyrics, but if his writing is to rise to the level of art, he must transform these private emotions which are purely his own and have a significance for himself only, by his creative impulse, if he has any, into emotions which are no longer personal but universal in the sense that they are now shared by others, and have a significance for others as well.

This transformation is usually achieved by a writer by suppressing his eccentricities and accentuating such aspects of his emotions as are likely to produce sympathetic echoes in the minds of his readers. It is in this disengagement of the universal from the individual or the particular, that art comes into being. In all probability, Aristotle had this idea in his mind when in his *Poetics* he made the famous statement that poetry deals with the universal, history with the particular, or the other statement that history deals with the thing that has been, poetry with the thing that may be, being probable and necessary.

What tragedy was there in his life when Shakespeare wrote his *Hamlet*, we do not know. Quite likely, the play symbolizes, as some critics have suggested, some sufferings, the frustration of some ideal in his own life. But we like the play, not because of the sufferings or tragedy in the individual life of the dramatist or the prince of Denmark, but because of the identity or similarity which, the thoughts and sentiments of the hero as expressed in the play, have with ours. *Hamlet's* problems, sufferings, and frustrations in some way typify our own. The tragedy of *Hamlet* is our tragedy intensified by rank and station. We are all *Hamlets*. The secret of all great writings is that in them the writers start with their personal feelings and thoughts, their own sorrows and joys, but instead of ending in them, as inferior writers do, they go beyond them, beyond themselves, and at times beyond their own time and place, and identify themselves with the humanity at large.

The appeal of Kalidas's *Meghaduta* is so great and universal because through his immortal lyrics, Kalidas voices the pains and agonies of all lovers of all ages separated from their beloved ones. The appeal is as great even to those who are not lovers. For the poem has a symbolic significance

as well. The poem represents in it the symbol of an ideal which cannot be realized because of some insurmountable difficulties and obstacles. Though in other respects they may widely differ, the great lyrics, like those of Keats, Goethe, Shakespeare, Browning, Kalidas and Tagore, possess in common this essential quality of being at once personal and universal. Another common feature of all great poetry is that it is highly suggestive and evocative of varied responses.

The great writings are always characterized by the greatness of thoughts and sentiments of the writers. And the highest purpose of a writer should be to communicate to his fellow beings, the best and the noblest of his thoughts and feelings, in the happiest and the choicest of words, so as to contribute to the establishment of universal brotherhood among mankind and the creation of a better human world. But the achievement of that purpose falls but to the lot of very few. For most of us are not capable of thinking or feeling greatly; and, those few amongst us, who are, do feel, think or live their best only in rare moments. We are concerned, most of our time, with the simple, commonplace, material interests that sweeten our humdrum existence. For the human spirit does not always soar to the sublime heights of science and song. More often than not it moves on the ordinary plane of existence, and is preoccupied with the commonplace things of material interests, which are as much vital to its existence in this world, as are the noblest of our songs and thoughts for its ecstatic flight to the ethereal heights. By giving a simple expression to these simple interests of life, a writer can fulfil an end, which is, if not the highest he should have in view, at least not ignoble; and, even for that alone, his existence as a writer will be more than amply justified.

All of us, it is true, cannot be great writers, or fulfil the highest purpose of writing, viz., the best and the happiest expression of the best and the happiest thoughts and sentiments. All of us are not divinely gifted for the task. But many of us can, if we so desire, turn to the other uses of writing and fulfil with our limited powers certain other functions, which will do much to lessen the dryness and the drabness of our everyday life, by adding gaiety,

(Continued on page 244)

THE U. S. PRESIDENTIAL INAUGURATION

By EUNICE TOWLE

The pomp and ceremony that accompany inauguration of a new U.S. President have evolved from practices and traditions followed by Chief Executives throughout American history. Some Presidents have preferred simple, unpretentious ceremonies with a minimum of pomp—Thomas Jefferson and Andrew Jackson walked informally through the streets of Washington to be sworn in at the U.S. Capitol.

Others have been the centre of elaborate festivities, sometimes more brilliant than the Presidents had expected or desired. Nevertheless, the modern celebration has become an impressive event as the increasing number of states send colourful entries to the parade that follows the ceremony at the Capitol.

Symbolic of the way in which the reins of government are handed from one Chief Executive to another, reflecting a spirit of cooperation for the welfare of the nation as a whole, is the fact that both the retiring President as well as the newly-elected Chief Executive ride in the same open limousine through the streets to the Capitol building.

When George Washington took the oath of office as first President in 1789, the new nation's capital was in New York City. Jubilant over the recent winning of independence in the American Revolution, citizens made his journey from his Virginia home to New York a triumphal procession. Washington was greeted by enthusiastic crowds in every village and town along the way.

When the seat of government was moved from New York to Philadelphia, the inauguration ceremonies were held in Congress Hall where Washington took his second oath of office and delivered the shortest inaugural address on record—135 words. John Adams, his successor, was also sworn in to office there in 1797.

The first President who took office in the new city of Washington was Thomas Jefferson, 1801.

An eloquent exponent of democracy who disliked pomp and ceremony, Jefferson walked from the boarding house where he had lived as vice-president to the then incomplete Capitol only a block away. He was accompanied by a parade of pedestrians, riflemen and artillerymen.

At his first inaugural in 1829 Andrew Jackson marched on foot up Pennsylvania Avenue and after completing his inaugural address, he pushed through the crowds, mounted a horse and rode to the White House. He was followed by people on foot, in carriages, and in farm wagons. The Chief Executive's mansion was thrown open to all who wished to enter and became so crowded that refreshments were finally served on the lawn to entice the celebrants from the White House.

Abraham Lincoln was inaugurated for the first time under turbulent circumstances. Elected President in November, 1860, he watched South Carolina secede from the Union in December, followed by the formation of the Confederate government two months later. Undaunted, Lincoln went through his inaugural ceremony with determination that he would hold the Union together.

By the time he was inaugurated the second time, four years later, the tide of war had definitely turned in favour of the Union so that he spoke on a much more optimistic note. His brief address of that occasion is considered a classic in American literature, particularly the last paragraph.

The unusual swearing in of Calvin Coolidge as President in 1923 appealed to the imagination of the American people. The vice-president was visiting his family home in Plymouth, Vermont, when his father learned of the death of President Warren G. Harding. The oath was administered by Coolidge's father,—a unique case in history—long a notary public in the community, in the family sitting room by the light of a kerosene lamp—the only type of illumination available in that modest farm home.

Franklin D. Roosevelt set a precedent by being the only President who took the oath four times.

Chief Justice Earl Warren administered the oath to the 35th U.S. President, John F. Kennedy on January 20, 1961. The oath stated: "I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will to the best of my ability, preserve, protect and defend the Constitution of the United States."

Progress Of Handloom Industry

By SHRI V. SUBRAMANIAN
Secretary, All India Handloom Board

Centuries before the machine was invented to weave cloth, the handloom industry in India had attained a high degree of perfection. The history of the handlooms dates back to the Vedic times. The handloom weaver enjoyed a virtual monopoly in the absence of the machine. The advent of machine age spelt danger to the handloom weaver, though as the largest cottage industry in India, it continued to occupy a proud place in the national economy. Its continued existence through the centuries to date constitutes by itself a saga of remarkable resilience.

The second World War gave considerable stimulus to production of cloth by the textile mills in India. So long as the demand of cloth remained active, the handloom industry was in a position to share with the mills the advantages resulting from the boom period of the war. The sale of mill cloth did not impinge on the sale of handloom cloth, as there was scope for the sale of both. Conditions, however, began to alter in the latter half of 1951. Due to various reasons, the sales of handloom cloth declined sharply and unsold stocks began to accumulate in handloom factories, co-operative societies and with individual weavers. This resulted in untold misery to weavers who were faced with acute unemployment.

Rehabilitation Measures

The Government of India was quick to realise the gravity of the situation and took several steps for the rehabilitation of the industry and entrusted the work with the All India Handloom Board in 1952. The Handloom Board realised that the development of the handloom industry could be achieved on sound lines only if the main difficulties posed by the lack of organisation, lack of technical assistance and research, inadequate supply of yarn of the required counts at reasonable prices, and inability of the handloom cloth to compete on equal terms with the mill cloth were resolved.

The worker, under a master weaver has no say with regard to the sale price and he cannot share the profits made by the master weaver. The independent weaver has not at his disposal the benefits of research and technical assistance which

only organised institutions could hope to offer. Therefore, if the handloom weaver is to be assured of the full fruits of his labour, he is to be given proper guidance and assistance. The only organisation, which can deliver the goods so far as the weavers are concerned, is the co-operative one. Co-operation offers the best medium to ensure maximum benefits to weavers. The co-operative societies provide the weaver with yarn and take back the finished goods. They also provide their members with continuous work as far as possible and give remunerative wages. They are constantly seeking to improve the techniques of production as well as the productivity of the looms. They aim at improved housing and other facilities required for the industry. A portion of the profits is set apart for paying bonus to the workers. The common fund created from the net profits is utilized for extending assistance for maternity relief, education etc. The thrift habit is an essential part of the co-operative system and is also inculcated by encouraging the saving habit among the weavers.

In order to encourage the weavers to come into the co-operative fold, the Government give loans repayable in easy instalments to the weavers to enable them to subscribe to the share capital of weavers' co-operative societies. As a result of the assistance rendered by Government, the period 1955-60 witnessed a remarkable growth of the weavers' co-operative movement. The number of looms under the co-operative fold increased from 6.82 lakhs in 1958 to more than 12 lakhs in 1960. Production of cloth has increased during the same period from 1100 million yards to nearly 1900 million yards, representing more than 25 per cent of the clothing needs of the country. The paid-up share capital and the owned resources of the weavers co-operative societies have also increased by more than 50 per cent.

In the past, the working capital needed for each loom was provided by the weaver himself from his own meagre resources. Later, the class of master weavers came into existence and their hold on the weavers increased as time went on. They provided all the working capital required and arranged for the marketing of

finished products. Thus the weavers in course of time became mere wage earners. This state of affairs continued for a fairly long time and it was only when the weavers began to organise themselves into co-operatives that the situation improved. Though the co-operative societies thus formed should have met all the working capital requirements of their weaver members, hardly a few could do so, as their resources were generally poor, the share capital paid by the members being their only source. The societies had, therefore, to borrow funds. As no one including the co-operative banks would lend them money, Government advanced from the Cess Funds loans for working capital of the co-operative societies. However, from 1st April, 1957, the Reserve Bank of India has agreed to provide these credit facilities through the State and Central Co-operative banks.

Sales Promotion

Weavers, who have joined the co-operative organisations, need not now worry for the disposal of finished products. The All India Handloom Board has taken several steps for marketing of handloom products which include sales promotion, publicity and propaganda, award of prizes, quality control, establishment of sales depots, inter-State depots, mobile vans, and payment of subsidy on sales or rebate.

Sales promotion activities undertaken by the Board, have noticeably increased the demand for handloom cloth. This has naturally benefited not only the weavers, but also all those engaged in the handloom industry. Financial assistance is given by Government for opening of sales depots by State Co-operative and Primary Weavers' Co-operative Societies, for running mobile vans and push carts, for opening of inter-State depots and for arranging retail sales in the interior places, through a system of hawkers. In addition, steps have been taken to create demand for handloom fabrics in the overseas markets. As a result of these measures, the co-operative societies are able to give almost full-time work to their weaver members, whose income is not only regular now, but has also increased considerably.

Improved Appliances

To increase the production and to improve the designs and quality of cloth, several time and labour-saving devices and

accessories like reeds, healds, dobbies, slays, fly shuttle looms, etc. are supplied by Government through the weavers' co-operative societies. By the use of the fly shuttle looms, production per loom will increase substantially. Take-up motion attachment helps to produce fabrics with a constant number of picks per inch. This device is expected to increase the production per loom, as the stoppage of loom for the purpose of winding the cloth or unwinding the wrap will be reduced in view of the automatic take-up and let-off motion in the attachment. It is a simple device and can be easily fitted to both pit looms and frame looms.

Warping machines, warping frames and warping drums help to prepare longer warps and increase production per loom, as the loom stoppage will be reduced on account of less frequent changes of warps. Dobbies and jacquards are utilised for production of figured borders or figures all over the patterns. Dobbies are used for the production of smaller figures, whereas jacquards are used for the production of large figures or patterns. By using steel reeds in place of bamboo or cholam reeds, the ends per unit space in the fabric; will be more uniform. Varnished healds and wire healds are used along with steel reeds in order to enable the formation of longer sheds and get more production per loom. The use of roller temples assures the selvages of the handloom cloth are even. When fabrics in multi-colours, and particularly check-patterns, are to be woven, the use of drop boxes can increase the production per loom, as the change of colour in weft can be effected without stopping the loom. Pedal looms and semi-automatic looms will give larger production as compared to pit or frame looms and thereby increase the earnings of the weavers. For example, during the time taken for weaving a quantity of 3 yards on a throw shuttle loom, or 5 yards on a fly shuttle, 12 to 15 yards on a semi-automatic loom and about 20 yards on a pedal loom can be produced.

Government are also giving assistance to Weavers' Co-operative Societies for setting up their own dye houses, so that they may not have to depend on out-side agencies for getting the yarn dyed. This enables the societies to reduce the cost of production. In order to give attractive finish to the cloth woven and thereby increase its

marketabilities, Government have given assistance to set up finishing and calendering plants.

Training and Service Facilities

The progress of the handloom industry depends not only in introducing many time and labour saving devices, but also on the weavers getting proper training in utilising these devices. Realising the importance of this, Government also give financial assistance to the weavers who undergo training. Training is also given to the employees of the apex and primary weavers' co-operative societies, so that the affairs of the society can be effectively managed. Weavers as well as employees of the societies have taken benefit of such training.

In order to provide technical personnel and to conduct research, Government have started technical institutes at Varanasi and Salem. The Weavers Service Centres of the Handloom Board at Calcutta, Varanasi, Bombay, Madras and Kanjeeपुरam are intended primarily to serve as channels

through which the handloom industry receives designs, technical advice and assistance in production processes. They function as institutes for training expert weavers in the use of jacquards, dobbies and improved appliances and pattern makers and dyers.

Housing Colonies

Merely increasing the earnings of the weaver is not enough. He should be able to live in congenial healthy surroundings and should also have a comfortable place to work. With this purpose in view, Government have introduced schemes for the construction of housing colonies. The weaver pays for cost of the house in easy instalments and in due course of time, he would own the house for himself. As on March end last year, 18 such houses have been completed and 1779 are under various stages of construction out of a total number of 4487 houses sanctioned so far. The schemes for housing colonies provide for such amenities to the weaver as drainage, water, playground and park for the children to play.

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Prospects of Cooperative Movement in India

By ARUN CHANDRA GUHA, M.P.

In this world of conflicting economic interest, co-operation is perhaps the only solution for peaceful social development. There was a period of private capitalism, and it had its immense contribution in the economic development of human society. But it also accentuated the economic conflicts—between man and man, between class and class and between nation and nation. Then some social thinkers thought of socialism; but socialism of earlier days, i.e., of Owen, St. Simon, Fourier, etc. was later on denounced as utopian. A new type of socialism was propounded about a century ago by Marx and Engels. Their theory was put into action by Lenin in Russia after the October Revolution of 1917. In this socialism or communism—as it is now known—the individual man is liquidated and is merged in the social entity or the State. Neither in capitalism nor in communism, the ordinary man can find his due and just place in the society; in both the ordinary man is dominated and exploited—in one case by a big boss and in the other by the bigger boss—the State. But co-operation seems to provide a happy mean between these two extremes.

What Marx defined as primitive communism was nothing but co-operation in primitive society. There, wealth and the means of production did not belong to individuals—nor did they belong to an all-absorbing and all-engrossing State. Social order then was based on mutual aid or free collaboration among equals. In co-operation these are the two essentials—collaboration must be free and among equals. So when, we read of co-operation in communist countries, we miss both these two features. There, working together in collective farms is not free but compulsory; and the participants or the members are not all equal. If we want to build up co-operative ventures and institutions in India, we should be careful about these two factors. It should be realised that co-operation can really function only in a democratic social order—where the individual is allowed freedom to decide for himself. In our zeal for statistical achievement, we should not sacrifice the essence.

There are various forms of co-operative institutions. In India the most popular is the co-operative credit society. But, what is now more important is the co-operative

venture in production, i.e., for agriculture, cottage and small scale industry. Another class of co-operative venture is in the commercial line—e.g., consumers' co-operative, supply, sales and marketing co-operatives etc. It has also been extended to other fields—viz. housing, sanitation, education etc. With the emergence of the welfare State, sanitation, education and similar other social services are now being taken up by the State, so there is not much necessity for co-operative venture in these. In India, we have great necessity of extending co-operation to production, marketing, distribution, supply, sales, etc. and to improve the quality and extend the scope of co-operative credit societies.

Let us first take the case of the credit societies. The general complaint against these societies is that, these do not help the really needy, but help only the comparatively richer section of the people. The question of extending their help from the credit-worthy to the credit-deserving persons is being discussed for a number of years. Just a few months ago, the V. L. Menta Committee recommended—"A primary society should not deny loan to a person merely on the ground that he does not own land." We are not yet sure if the societies would agree to implement this recommendation. To foreign delegates, it may appear surprising that there can be an agriculturist without owning any land; but in India, it is not a rare case. There are some agriculturists who do not own any land at all; and there are some who own small and uneconomic holdings. Number of these two categories would be 25 per cent of our agriculturists. To provide loans and other agricultural facilities to them is a question of some importance—which the co-operative credit societies have to face and decide.

To improve the working of these credit societies, we have to improve their financial position, e.g. to increase their own fund and their deposits, to decrease the amount and percentage of overdues and to link credit with supply of raw materials and marketing of products etc. And above all, we have to improve the management of the co-operative credit societies. The present condition of these societies is far below the required standard in these respects. We are not sure if the present tendency of

reverting to smaller co-operatives and of elimination of Government participation and of some Government supervision would not retard the qualitative improvement that was envisaged with bigger societies and Government supervision.

Credit societies are rather familiar with us—as these have been functioning for some years. But comparatively now there are other types of co-operative societies which of late have attained importance e.g., co-operative farming, industrial co-operative etc. The Government of India have now adopted the policy of introducing co-operative farming. India is a land mostly of small holdings. It is difficult to introduce improved agricultural methods in small holding cultivation. Yield per acre is very low in India; it may be the lowest among civilised countries. To increase our food production, we shall have to increase our yield per acre. So the putting together of small holdings for joint cultivation is an important point in our agricultural economy. And this can be done only through co-operative farming. But it is a difficult job.

Peasants' love for their own lands is well-known; they are awfully reluctant to part with the proprietary rights of their lands. In totalitarian countries, the obstacle has been over-come by compulsion. But, as we know, compulsion cuts at the very root of what is known by co-operative movement. So, this obstacle has to be removed by persuasion, i.e. by publicity and propaganda and preferably by demonstration of the benefits of co-operative farming. It means a slow process—tardy and tortuous. Still, the process can be speeded up if the Government, i.e. the administration acts with faith, imagination and tact. I do not know if these virtues can be expected of our present administration. In a democratic set-up, administration does not possess any faith of its own; its faith is simply to implement the policy adopted by the party in power. In the labyrinth of rules, regulations, standing orders etc. the personal virtues of being imaginative and tactful cannot find much scope; officers have to specialise more in finding out the technicalities and niceties of rules and regulations than in tackling human problems.

It is because of these factors that legal technicalities are so hard and stiff that they more often baffle than help the formation of co-operative societies. It is be-

cause of these, that the formation of co-operative farms has proved to be a difficult task and has proceeded slowly. But a beginning should be made, as early as possible, of setting up demonstrative co-operative farms in each district and then in each sub-division which will give practical proof of the benefits and better yields in such farming. Some compulsion may be necessary for such demonstrative farms—particularly for acquisition of lands. At the same time earnest attempts should be made for setting up service co-operatives—which are half-way-houses between co-operative and individual farming. For the last two years we have been hearing of service co-operatives and we expect some progress has been made in this regard.

Next in importance is the industrial co-operative. India is a heavily congested country; population pressure on land is increasing year after year. And India is a rural country; at least 75 per cent of our people live in rural areas. So we have to develop alternative source of income and livelihood for rural people. That is possible through rural cottage industry; but it cannot survive and prosper without up-to-date implements, and methods of production. For this a co-operative attempt is better suited than attempts of individual craftsmen. But as yet, that is the weakest point in the community development and the co-operative movement. But we expect, better results will be forthcoming in near future if a special drive is initiated in this direction.

We need not discuss all the forms of co-operatives—we have to set up and have undertaken to set up. Yet we can just mention some of them. Co-operative marketing can ensure better price to the producers; co-operative supply will give the consumers' goods and the raw materials at a cheaper price; land mortgage banks—perhaps the most neglected item as yet will help the peasants in land developments. All these are in our programme and definite steps have been taken for all these.

The initial troubles are there; as yet the progress is slow. But there is one good sign—a strong discontent against the slow progress. This suggests the existence of a strong urge among the people for co-operative societies. This urge will have its repercussion on the officials and the administration. We should try to utilise this urge and

(Continued on page 244)

EARTHQUAKES: WHY THEY OCCUR

By Prof. S. V. SRIKANTIA

The phenomenon of earthquake is as old as our present continents and mountain systems. Earth has suffered earthquakes for at least some hundreds of millions of years. Recorded descriptions of earthquakes go back to nearly 2500 years. Early historical records contain references to earthquakes as far back as 1800 B.C. In the historical times it had always been associated with portents and impending disaster. It was believed that when evil increased God expressed his displeasure by causing earthquakes in that region. There is a mention of earthquake in our great epic Ramayana wherein it is said that our earth is borne by four mighty elephants called Veerupaksha, Mahapadma, Soumaisa and Bhadra in East, South, West and North directions, respectively. Whenever any one of the elephants shakes its head to relieve the strain the earth trembles and there is an earthquake. Similar mythical belief was also prevalent among the ancient Hebrews, Greeks and Christians. Our ancients attributed earthquakes to supernatural causes. Much superstition had shrouded their occurrence.

Wrong Notion

In course of time man poohpoohed various superstitious notions regarding earthquakes, but again picked up a wrong notion to explain them. When the great earthquake in the Campania on February 5, A.D. 63 destroyed the city of Pompeii, Pliny made a study of it. In those days earthquakes were believed to be the cause of "elemental forces", namely air, fire, earth and water. The chief proponents of this view were Thales, Anaxagoras, Anaximander, Aristotle, Seneca and others. It was thought that the earth was like a great sponge containing innumerable caverns into which and out of it violent winds rush to and fro shaking the whole globe; or thick clouds of vapour as a result of a great central fire inside the earth would rock the earth by its enormous pressure.

With the advancement of seismological science and better understanding of the problem of earthquakes mature ideas have been formed and the new studies have conclusively shown that the wonderful, romantic and age-long concepts and ideas concerning the causes of earthquakes have been completely dissipated.

Causes

Earth trembles for certain reasons. It is controlled by natural forces. From time to time changes take place within the earth's crust due to volcanic, tectonic, plutonic and other causes as a result of which there is sudden release of enormous energy within some confined region of the earth. On account of this release of energy shock waves are set up which travel in all directions. The extent of this energy is stupendous. It has been calculated that the energy given out by the great Assam earthquake of 1950 was of the order of a million atom bombs.

People of Japan and Italy have the experience of witnessing the awe-inspiring spectacle of volcanic eruption when hot molten lava comes out of the magma chamber with a large quantity of gases and vapours. This movement of magma and gases within the earth's crust during a volcanic eruption is one of the means of starting an earthquake. Violent volcanic outbursts may cause earthquakes of light intensity and limited extent since they are shallow seated. The damage caused by them is confined to within a few miles of the region. They generally occur in series with increasing intensity until the eruption takes place after which they cease.

In recent decades it has been established that major earthquakes arise from a quick shock produced by a sudden yielding to strain by rocks in the earth's crust. This yielding may produce a crack in the crust and a slipping along the already existing fractures or faults. On account of these adjustments, movements take place parallel to crack. Any resistance offered by the closely compressed rock to such yielding may produce powerful vibrations which are also transmitted through the earth as a series of tremors or waves and are recorded at different places on seismographs. These tectonic earthquakes, which are the result of a movement along the cracks or faults in the crust, are capable of spelling disaster at distances of several hundreds of miles from near the origin. Indian earthquakes have been attributed to tectonic causes.

Earthquake shocks also occur due to the collapse of underground caves in the limestone country, to landslides and rock bursts in deep mines as experienced in the

Kolar Gold Mine areas of Mysore. They are purely local in extent.

Plutonic earthquakes are deep-seated and are the result of compressive forces acting on the rocks and also the creation of hypothetical volume due to mineralogical changes in rock types at great depths.

Blasting of atomic bombs is also capable of producing shock waves of a minor earthquake.

The centre of origin of an earthquake is called the focus and earth waves are propagated in all directions from the centre of origin. The depth of focus varies from 7 km. to 700 km. The point on the earth's surface directly above the focus is the epicentre. The damage due to earthquake is maximum in the epicentre and the intensity of it decreases from the epicentre.

Earth Waves

Earthquake waves travel at varying speeds depending on the media through which they pass. They travel fastest through denser medium. There are 3 types of earth waves—two are elastic waves called longitudinal or P-waves and transverse or S-waves. When they travel they take a short course through the interior of the earth. P-wave travels faster than S-wave and the interval in time between the arrival of these two waves at any seismological station determines the distance of epicentre from that station. By studying such records at three different stations we can locate the position of the epicentre. The third wave is called "surface wave" and it takes a longer course and travels round the earth. It is last to arrive at any station and causes much damage and destruction all through its passage.

We have a wrong impression that the ground moves over a long distance during an earthquake. The actual movement of the ground is very small, sometimes only a fraction of a millimeter. When it reaches 10 mm. it causes much destruction. Twenty mm. means havoc and disaster.

An earthquake rarely lasts more than two minutes and most of them only a few seconds. But its effect is felt over areas of thousands of square miles and affects the life and property of millions.

The intensity of an earthquake is estimated by the effects it produces on people

and objects in the area affected. The intensity of and destruction caused by a shock in any locality depends not only on the original energy of the shock but also on the nature of the soil and on the kind of structure destroyed. In order to fix the intensity of the shock due to an earthquake at different places round epicentre, many scales based upon the effects produced by the earthquake have been proposed. Of these the Rossi-Forel scale is widely followed. It contains 10 grades, with the increasing grade of destruction from No. 1 to No. 10.

Destructiveness

The destructiveness of an earthquake is due to the velocity of the shock waves. As the waves move forward the objects upon the surface are set in motion. The forward movement of the ground, however, is immediately followed by the backward movement. Tall buildings, if rigidly built, sway or oscillate back and forth during an earthquake shock and if poorly built, are destroyed. If a building is not too high and is well built, it will not be seriously damaged beyond the cracking of the walls, breaking of glasses and the destruction of chimneys. The great damage to buildings is inflicted upon those located on a soft ground. The ground moves and slips irregularly in various directions, and the buildings upon it, unless very rigidly built, are rocked to pieces. The great losses of life in an earthquake are generally due to the poor construction of the houses. Besides the damage due to the earthquake fires causes great destruction of life and property. Fires that start in towns and cities during or following an earthquake shock cause terrible destruction because the water mains are usually severed by the earthquake and there is no water for fighting the fire. During the Tokyo Earthquake of 1923, an area covering 8300 acres of the town was on fire.

The area affected by earthquake waves is often extensive; in the case of the Assam earthquake of 1897, is estimated, an area of 1,750,000 sq. miles was affected.

Earthquakes bring about marked changes in the topographical features. There will be subsidence and elevation of ground, change in the river courses, thereby causing untold misery to the people living in those areas, widespread flooding, wide cracks in the ground, destruction of agri-

cultural lands, drying up of rivers and lakes, and many more acts of destruction.

Sea-Floor Earthquakes

When there is an earthquake on the sea-floor, due to the transmission of the movement of solid rocks to the mobile water above, giant sea waves, called Tsunamis, are produced. Such waves are of exceptional size, sometimes more than 60 feet, and travel at an average speed of 300-400 miles per-hour. If the waves reach the shore while still of considerable magnitude it may cause great damage to the life and property in the coastal region. In the recent Chilean earthquake Tsunamis caused great havoc.

Very frequently accompanying earthquakes, often preceding them and sometimes following them, there are audible noises of low pitch. They are usually heard, if at all in the area around the epicentre. The sounds are compared with distant thunder, roaring of wind, sounds of blasting and so on.

Occasionally during an earthquake shock or immediately before or after observers report luminous phenomenon in the horizon. They are steady glows, balls of fire and streams. They do not seem to be connected with the actual phenomenon of earthquake.

Major earthquakes have occurred in certain parts of the world. There are two belts of earth's major earthquakes. One belt passes round the Pacific Ocean and affects the countries bordering the Ocean, for instance New Zealand, New Guinea, Indonesia, Japan, Aleutian Islands, Alaska and the Western region of North and South America. The second belt passes from the Mediterranean towards the east affecting North African countries, Italy and Sicily and further passes through West Asia and Middle Asia, including Northern India and joins the first belt in the East Indies. There are a number of lesser belts of seismic activity in the Arctic Ocean, the Atlantic Ocean, the Western Indian Ocean and East Africa. The other parts of the world experience at least occasional normal earthquakes.

Indian Earthquakes

Some of the earliest recorded earthquakes have occurred in India. The earliest seems to be the one which rocked parts of North India during the year 393

A.D. when it took a toll of 1,80,000 persons. India has an unenviable reputation for earthquakes. During the last 150 years nearly 25 earthquakes have occurred and they account for the loss of nearly 70,000 lives and are responsible for enormous material damage.

The history of Indian earthquakes has shown that most of the destructive ones have taken place in and along the foot-hills of the Great Himalayan mountains, while the region south of the Indo-Gangetic plain has remained free from major earthquakes, with the possible exception of the Bellary earthquake in Mysore State on April 1, 1843. The Peninsular part of India is a region of high stability. They mostly constitute the oldest rocks of the earth's crust and with the mountain building activity here having ceased long ago the area is in a geologically static condition. Occasionally, however, very feeble shocks are felt in some parts of the Peninsula, particularly around its margin. Sympathetic shocks occasionally arise in the Peninsula at the time of major earthquakes in North India. However, people south of the Vindhya can live in their charming surroundings without any trembling.

Near the foot-hills of the Great Himalayas to the north of the Indo-Gangetic plain, from the Kashmir Valley to the hills of Assam and Burma, the older rocks of the Himalayan system have been thrust over the younger rocks of the Siwalik system in the region known as the Great Boundary Fault Zone of the Himalayas. This region has been the scene of nearly 40 great earthquakes during the last 100 years, some of them like the Assam Earthquake of 1897, the Kangra Earthquake of 1905, the Bihar-Nepal earthquake of 1934 and the Assam earthquake of 1950 are among the great earthquakes of the world. The Assam earthquake of 1897 is regarded as the greatest earthquake in human history. This earthquake was followed by great train of aftershock continuing for 10 years. The Assam Earthquake of August 15, 1950 has been considered one of the five biggest in human history. The Assam region alone has been the victim of about 12 major earthquakes during the last 100 years.

The Indian earthquakes are of tectonic origin. They are to be regarded as a legacy of the great earth movements that convulsed the northern flank of India during tertiary and quaternary periods and the oc-

currence is confined to a zone that is a part of the West-East earthquake belt that extends from the Mediterranean to Indonesia. The immediate cause of all these tectonic earthquakes is attributed to the slipping of rocks along a fault plane, on the two sides of which the rocks have been relatively displaced. In a few cases the relative displacement of rocks along a fault is visible on the surface as in the Kangra Earthquake of 1905. In the case of the Assam Earthquake of 1897, visible movements of rocks were traced along the Chedang fault for a distance of 12 miles with a maximum vertical displacement of 35 feet. In the Bihar-Nepal Earthquakes of 1934 the movement took place below the alluvial plains of the Ganges. The Assam Earthquake of August 1950 originated in a displacement along a major fault surface running across the Assam Syntaxial bend striking north-east and south-west for about 100 miles. Geologically the region now called the State of Assam has been regarded as the most unstable region in the world. It is, therefore, no wonder that this region has been the scene of many great earthquakes.

In order to alleviate the hardship caused by earthquakes scientists are striving hard to find means to predict the time and place of the occurrence of earthquakes so that advance precautions can be taken. So far man has not succeeded in his efforts and all he can do now is to take a lesson from the past experiences and try to minimise the loss of life and property by suitably constructing his buildings to withstand the rigours of earthquakes. There lies his salvation.

(Courtesy: **The Tribune**)

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THE ART OF WRITING

(Continued from page 234)

charm, and colour to it. We do not require any high creative powers or thoughts, nor do we need to tap the richest resources of the language at our command, to dash off a letter to a friend, draft a resolution for a meeting, frame an address to a distinguished guest, compose a poem for a social function, or, to write an article for a journal. For these and such other commonplace things of life what we need is to get the right word however simple, for the feeling or thought however commonplace. These simple interests of our humdrum existence, even a great writer can hardly afford to ignore, without a vital impoverishment of his function as a writer. For the function of a writer, in the wider sense of the term, is to deal with life as a whole and in all its fulness, with all the infinite variety of its interests great or small. Life's little things fall as much within his scope as the biggest systems of thoughts, and the sublimest of sentiments and passions.

(Courtesy: **The Hindustan Standard**)

Prospects of Cooperative Movement in India

(Continued from page 240)

canalise it to constructive line. Their nostalgic preference for the current and the prevalent things and their opposition to any opposition can be overcome by making it appear in the form of an old familiar institution. In rural areas co-operation or mutual aid is not an unknown factor. Rather, our ancient village economy was built up on the basis of mutual aid. With the disintegration of rural society and rural economy under alien rule, the idea of mutual aid gradually disappeared. If we give them the old and familiar names and forms even deviating a little from the set pattern, we may get better response. A study should be made to see how far our old rural pattern of mutual aid can be restored. There should not be too much insistence on the form and pattern as taken from abroad; by necessary local variations we should make it appear to the rural people as if an old indigenous institution is being restored.

The best way to secure future happiness is to be as happy as is rightfully possible today.—**Charles W. Elliot**

Teachings of —

MAHATMA



GANDHI

Q. Write in brief, Gandhiji's ideas about the doctrines of karma and rebirth.

Ans. Gandhiji believes in the doctrines of karma and rebirth. According to him, "The law of karma is inexorable and impossible of evasion. We are the makers of our own destiny. We can mend or mar the present and on that will depend the future."

As for the doctrine of rebirth, he writes, "I believe in rebirth as much as I believe in the existence of my present body. I therefore know that even a little effort is not wasted."

These two doctrines are no more unproved dogmas; they are laws of life deduced by the Indian seers from spiritual insight and verified by experience. The law of karma has been called the moral law or the law of moral continuity. According to this law our future will grow out of the present even as the latter is the outcome of our past.

As for the theory of rebirth, which has been current among the Hindus since the time of the "Rig Veda", it stands to reason that so far as man has not fully realized himself he should continue to have opportunities for self-development, and death should not put an end to these opportunities.

The acceptance of the law of karma, however, does not mean to Gandhiji that our life and activities are completely determined. Such determination paralyzes moral effort and cuts at the very root of ethics. It also denies creativeness to the human spirit and deprives man of the privilege of establishing his own government. There is no antithesis between the law of karma and the freedom of will. In fact, the doctrine of karma implies freedom, for it lays down that man is the architect of his own destiny. According to Gandhiji man can counteract the effect of past mistakes by attaining complete detachment. But "In spite of the greatest effort to be detached, no man can altogether undo the effect of his environment or of his upbringing." Thus Gandhiji does not believe in complete freedom which might enable man to

sever himself from or transcend nature. Such freedom will mean chaos.

Due to his belief in the spiritual nature of man, Gandhiji rejects the commonly accepted view that man is entirely the creature of his milieu. He does not, however, underrate the influence of the latter: "The majority of people are controlled by their environment." But he holds that man should try to live by self-direction, i.e., by the exercise of his will, rather than by mere habit."

Q. Write briefly Gandhiji's ideas about evil.

Ans. Gandhiji is not concerned so much with philosophical explanation of evil as with the specific kinds of evil, political, social and economic. "I know too," he wrote in 1928, "that I shall never know God if I do not wrestle with and against evil even at the cost of life itself." All through his long public life his preoccupation had been a relentless war against evil. In this crusade he did not neglect the milieu. He devised a new moral strategy. His philosophy deals with the method of regulating, along non-violent, lines, group-life in its political, economic national and international aspects.

Gandhiji says that he "cannot account for the existence of evil by any rational method." Evil, however, is real only from the limited human standpoint. For God there is nothing good, nothing evil. But the conception of relativity of good and evil is not acceptable to him, for its application to problems of actual life would lead us morally astray. "God and evil are, for human purposes, from each other distinct and incompatible, being symbolic of light and darkness. . . ." "Good was self-existent, evil was not. It was like a parasite living on and round good. It would die of itself when the support that good gave was withdrawn." "Evil in itself is sterile. It is self-destructive, it exists and flourishes through the implication of good that is in it. Science teaches us that a lever cannot move a body unless it has got a resting

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VOCABULARY TEST

(Living language is always in a state of flux. Not only do new words gain acceptance but old words, long dead, are sometimes revived - like **hassle**, which appears below. Not listed in any contemporary dictionary, it is being used increasingly in magazines and newspapers and on the air. Before you begin the following test write down definitions of the words you think you know. Then check the word or phrase in the printed definitions which you think is nearest in meaning to the key word. Correct answers are also given below.)

1. **Hassle**—A: a curtain pull. B: a decorative pillow for a couch. C: great haste. D: a wordy argument.

2. **Copious**—A: sad. B: drenched. C: abundant. D: stout.

3. **Animate**—A: to make more alive. B: to enrage. C: to grow coarse. D: to describe dramatically.

4. **Migratory**—A: greedy. B: poor. C: roving. D: combative.

5. **Assumption**—A: pigheadedness. B: an absurdity. C: a taking for granted. D: an untruth.

6. **Pique**—A: to hurt physically. B: to smile wryly. C: to arouse. D: to amuse.

7. **Avaricious**—A: ruthless. B: jealous. C: greedy. D: vain.

8. **Succulent**—A: sweet. B: luxuriant in growth. C: juicy. D: delicious.

9. **Preponderate**—A: to hesitate. B: to talk pompously. C: to outweigh in power or numbers. D: to think deeply.

10. **Turbulence**—A: rage. B: tumult. C: muddiness. D: strength.

11. **Forte**—A: a redoubt. B: great size. C: one's strong point. D: one's weakness.

12. **Aberrant**—A: reformed. B: confused. C: wandering. D: suffering.

13. **Provender**—A: forethought. B: supplies in general. C: wealth. D: feed for cattle.

14. **Indecorous**—A: plain or unadorned. B: lacking in humour. C: contrary to good taste. D: humorous.

15. **Residuum**—A: a remainder. B: a delay. C: a dwelling. D: a brief summary.

16. **Illicit**—A: drawn forth. B: secret. C: unknown. D: unlawful.

17. **Missiles**—A: prayer books. B: sacred relics. C: ancient scrolls. D: objects such as bullets.

18. **Comport**—A: to construct. B: to calm (oneself). C: to conduct (oneself). D: to give solace to.

19. **Poltroons**—A: aristocrats. B: the supports of floating bridges. C: clowns. D: contemptible cowards.

20. **Anomaly**—A: a comedy. B: the condition of being without a name. C: a deviation from the common rule. D: a disagreement.

ANSWERS

1. **Hassle**—D: The most common meaning is now "wrangle", a heated and wordy argument; as, "There was a **hassle** on the baseball field between the umpire and the manager."

2. **Copious**—C: Plentiful; abundant; ample.

3. **Animate**—A: To quicken and make more alive; inspire; give vigour to; as, "The sight of our flag will always **animate** our patriotism."

4. **Migratory**—C: Roving; wandering; moving from one country or region to another; as, "His habits are as **migratory** as those of birds of passage."

5. **Assumption**—C: A taking for granted; an assuming or supposing; a presumption.

6. **Pique**—C: to arouse; to stir up; as, "Every thing she says will **pique** your interest."

7. **Avaricious**—C: Greedy; covetous; grasping; taken for gain or wealth; as, "We have battled the **avaricious** gangsters for years."

8. **Succulent**—C: Juicy, as a fruit; rich in tasty fluids.

9. **Preponderate**—C: To outweigh in power, influence or numbers; predominate; (Continued on page 250)

STUDENT'S EMPORIUM

HOW FAST DO YOU READ?

Are you a "patient plodder" who goes steadily from word to word—or do your eyes dart about like a "nervous grass hopper"? They won't get you any where in quick reading. You've got to know all about "thought units".

The modern world is speedily burying itself under an evergrowing mountain of printed words.

From statesman to bank clerk, taxi-driver to housewife, we all depend enormously upon what we read. In fact, twentieth-century civilised man cannot get away from his reading.

All this being so, it is surprising how little thought we give as a whole to the efficiency of our reading. We can read, or at least most of us can, and that is all there is to it. Some may read quicker than others, a few continually skim and never really read properly, but reading efficiency is rarely considered.

Very few people stop to consider whether their reading capacity is working at peak

Most of us speak at about 200 words a minute, yet we are fortunate if we can read faster than 300 words a minute. In fact, millions of people can only read with comfort at about 200 words a minute.

The Americans have devised what they call Quick Reading. And they are teaching it in universities and colleges as well as to harassed business executives.

Briefly, the basic idea is simple and scientifically sound. In reading the printed page, the human eye dwells momentarily upon each word in turn, moving jerkily forward to the next as comprehension is achieved, sometimes going back a little way for a second look.

This, say the Quick Readers, is highly wasteful to time and effort and they produce films made on a gadget called the ophthalmograph to prove it. This instrument records on film strip the jerky, hesitant eye movements of the untrained reader, be he "nervous grass hopper" or "patient plodder." It is revealing to see

such a film of one's own reading. There is undoubtedly a waste of optical effort.

Fast reading requires that whole phrases and blocks of words ("thought-units") be assimilated together, instead of the single, disjointed word. First short phrases, then half lines and eventually whole lines of print are taken in at a smooth speed with, if the training is done aright, no falling off in comprehension.

Two ingenious machines, devised by one of the U.S. centres of quicker reading, the Reading Laboratory, Inc., of New York, are used in training courses to speed up this word-by-word method that we nearly all use without realising it.

Seated at a table and peering into the small box, the pupil sees words, numbers and short phrases momentarily illuminated. The exposures of the flashing light vary from one-tenth to one-hundredth of a second so there is no time for "second looks."

By a gradual increase in the complexity of the messages, ending with a difficult array of symbols or a complicated scientific statement, and a corresponding decrease in the exposure times, one learns, "with dramatic swiftness," to read and retain through really speedy and accurate focusing on "thought-units" rather than individual numbers, symbols or words.

Fresh from a quite invigorating encounter with this gadget, the learner quick-reader then moves to the electrical pacer, which is simply a book-rest over which there glides downwards at regular, controllable speeds, an opaque blind. This forces one to read more quickly.

The speed of the blind can be stepped up by the trainee, who in time should become a fully-fledged Quick Reader, but only if he or she has really understood everything read. There follows stiffish written tests to prove comprehension.

In America and at the Quick Reading Centre in London, where these methods were used for a trial period, many folk with poorish or average speeds have been taught to reach 700-800 words a minute,

and not a few over 1,000 words a minute, with full comprehension.

(By David Gunston in *World Digest*)

* * *

GUIDE TO CAREERS: THE MEDICAL PRACTITIONER

In view of the deplorable state of health in our country we badly need the services of medical practitioners, commonly known as 'doctors.'

A MEDICAL PRACTITIONER is a person with recognised medical qualifications, authorised to apply his scientific knowledge to the cure or prevention of diseases and bodily deformities and the maintenance of individual or public health.

A medical practitioner may specialise in a particular branch of medical science. He may become an expert in the treatment of a part of the body or in one particular disease or group of diseases or in surgery or any of its branches or in certain diagnostic examinations or tests connected with the treatment of diseases. Medical Practitioners specialising in particular branches are generally called "Specialists."

A medical practitioner attends to patients, gives them immediate relief where necessary, diagnoses or identifies their diseases or ailments, if necessary with the help of precision instruments and laboratory tests etc., and prescribes the treatment; he may administer drugs or give injections to the patients himself or may perform minor operations; if necessary he may refer complicated cases to a specialist or help in diagnosis or treatment.

For diagnosis, a medical practitioner studies the patients' history and observes the symptoms that show up, and all the peculiarities about them. He then makes a physical examination. Sometimes he may have to use precision instruments. However, for examination with most of the precision instruments, the medical practitioner is usually assisted by a specialist or medical institution.

If the physical examination and examination with the precision instruments do not reveal all the facts, he gets the patients' blood, urine, secretions, body fluids, etc., tested in the laboratory, by an expert pathologist. This becomes necessary also because most general practitioners do not possess laboratories for the purpose. Other methods of diagnoses are also resorted to when necessary.

After all the relevant facts have thus been collected, the medical practitioner decides what disease the patient has been suffering from.

After the diagnosis has been done, the medical practitioner decides what treatment to give. This may be the internal or external use of medicines or drugs, the administration of an injection, a surgical operation or any other remedy set out by medical science.

The medical practitioner has to handle medicines, drugs, precision instruments etc. The very nature of his work implies irregular hours of work and rest; he may have to attend to patients at all hours of the day or night. The medical practitioner's professional duties may involve travel, especially if he practices in rural areas. Sometimes he may have to visit his patients at their homes at distant places.

PERSONAL QUALITIES necessary for the job are good health and physique, and manual dexterity, the latter being still more essential in cases of specialists in surgery. The medical practitioner should have keen powers of observation and ability to keep a high degree of focussed attention. Good memory, capacity for judgement, ability to perform rapid mental work, ability for quick decisions, extreme exactitude and sense of responsibility are also important for him.

Tact in dealing with suffering patients and their anxious relatives, and the capacity to win their confidence, are equally important qualities. The medical practitioner must be a person of integrity and must strictly abide by medical ethics. Above all, he or she must be a person with a missionary spirit, with a sense of moral and social duty.

THE WAY TO QUALIFY as a medical practitioner is to obtain a medical qualification recognised by Government on the recommendation of a State Medical Council. This is recognised University degree in medicine or surgery or a recognised equivalent. The M.B.B.S. degree course is available in 51 medical colleges spread throughout the country and the annual total intake capacity is more than 4,000. The duration of course for the M.B.B.S. degree usually extends over 5½ years. This period includes a 6 to 12 month period of compulsory post-examination practical clinical training in a recognised hospital. For admission to the course, candidates must be

at least 17 years of age, and must have passed a recognised Intermediate examination in the medical group (Physics, Chemistry, Biology). Competition for admission to the medical colleges is very keen. Only candidates with good results in their Intermediate examination can hope to secure admission. Detailed particulars for admission to a particular institution may be obtained from the Principal of that institution.

The subjects of theoretical, practical and clinical study are: Anatomy, Physiology, Pathology and Bacteriology, Pharmacology including Pharmacotherapeutics, and Forensic Medicine including Toxicology, Medicine, including Pediatrics, Surgery, Midwifery and Gynaecology, Ear, Nose and Throat and Ophthalmology, and Social and preventive Medicine. The University degree examination is divided into several parts, each held after a specified period of study, and is written, oral, clinical and practical.

AFTER PASSING out of the University a medical graduate is required to register himself with the State Medical Council concerned. The State Medical Councils are statutory bodies authorised to maintain registers of persons possessing any of the basic medical qualifications recognised by the respective State Governments to prescribe codes of medical ethics for such registered medical practitioners, and to exercise disciplinary control over them.

Certain medical qualifications are recognised under the Indian Medical Council Act of 1933 as amended in 1958. The Medical Council of India, an all-India statutory body, establishes a minimum standard of qualifications in medicine. Recognition of a qualification by the Medical Council of India is proof of its conformity to the All India Standard, and evidence of its holder's satisfactory knowledge of, and skill in medicine.

FURTHER TRAINING is necessary if a medical practitioner wants to specialise in any branch, or if he intends to go in for research.

Courses of studies for recognised post-graduate diplomas and degrees in various branches or various specialised fields of medical science are available in many institutions. Medical graduates may also go in for research under Universities, and if successful, may be awarded research degrees of different levels, e.g. D. Phil., Ph.D., D.Sc.

The Government of India in the Ministry of Health awards a certain number of stipends to candidates admitted to the various post-graduate courses conducted in the upgraded departments in a number of medical institutions in India. The rates of stipend vary from Rs. 150 to Rs. 250 per month according to the basic qualifications of the candidate.

Selection of candidates for the seats reserved for Central Government nominees is made by the Directorate General of Health Services each year by calling applications from suitable candidates through advertisements issued in the Press and circular letters issued to State Governments etc.

Persons with degrees or post-graduate qualifications may go for study in foreign Universities or to academic bodies leading to qualifications approved by the Medical Council of India e.g., (F.R.C.S. and M.R.C.P.).

Certain International Organisations and Bilateral Agencies, e.g. The World Health Organisation, The Technical Co-operation Mission and The Colombo Plan, offer from time to time fellowships or scholarships to Indian Nationals under their respective Technical Aid schemes in various medical and allied subjects and only such candidates are eligible for consideration under these fellowship or scholarship Schemes, who are in the permanent service of Government or some other Body or Semi-Government Institution or non-governmental voluntary Organisation, who can guarantee the employment of the candidates on completion of the training in that particular field of work.

The training requirements of all State Governments are called for annually direct by the Ministry of Health towards the beginning of the year.

Certain foreign Institutions and organisations also offer ad hoc training facilities in medical and allied subjects. In most cases the entire cost of training is met by these agencies. These offers are in most cases circularised.

OPENINGS for general or specialised medical practitioners public health workers, research workers, teachers, and administrative medical officers are available. They may be in private practice, or in service under the Central Government, the State Governments, local bodies statutory bodies, industrial concerns, manufacturing concerns, or in private medical institutions, or in the Defence Forces.

ENTRY INTO THE PROFESSION should, if possible, be through engagement, in a hospital for six months to one year or for a greater period. This is apart from the normal compulsory period and is recommended for gaining experience and self confidence.

Entry into public institutions run by the medical or public health services, or into teaching or research under the Central and the State Governments is usually by application to the employers concerned. Posts are frequently advertised in the papers and sometimes notified to the Employment Exchanges. Selections for superior posts are frequently made by Public Service Commissions.

Experienced graduates or post-graduates may aspire for appointments in Class II or Class I (Grade IV) of the Central Health Service.

Entry into military service is through competitive examination held for direct recruitment of civilian male doctors for Permanent Regular Commissions in the Army Medical Corps. Medical graduates who are below 30 and are of sound constitution and health are eligible. Selected candidates are appointed as Lieutenants on probation.

Entry into service under local bodies, industrial concerns, private medical institutions, etc., is much the same as for public institution as described above. Vacancies are usually advertised in the papers and sometimes notified to the Employment Exchanges.

PROSPECTS FOR ADVANCEMENT for private medical practitioners rest upon a combination of various factors, e.g., efficiency, popular recognition of merit, and area of practice.

The merit of distinguished specialists may be recognised by appointing them to the much coveted positions of part-time Honorary Assistant Physicians, Honorary Assistant Surgeons, Honorary Physicians and Honorary Surgeons in hospitals, or as (part-time) teachers in medical colleges.

Persons in Government Service having the requisite qualifications, experience and efficiency may rise to higher posts. Such persons in Class II or Class I (Grade IV) of the Central Health Service may be promoted to higher grades in Class I of that service.

Teachers in medical colleges are eligi-

ble for research fellowships under the Indian Council of Medical Research, Rockefeller Foundation Programme, and also for Overseas Scholarships in different subjects including medicine, awarded by various International Organisations and Bilateral Agencies through the Government of India.

Provided that they are qualified and efficient, Lieutenants in the Army Medical Corps automatically rise by time-scale up to the rank of Lieutenant-Colonel through the successive ranks of Captain and Major. They may even rise further, if able and meritorious.

Persons serving statutory bodies, local bodies, industrial concerns, medicine-manufacturing concerns and other private medical institutions may get senior appointments, if they have the necessary qualifications and experience.

EMPLOYMENT OUTLOOK: The 2nd Five-Year-Plan aims at bringing about an all-round improvement and expansion of the medical and health services in the country.

A co-ordinated regional hospital system with four types of hospitals, the teaching hospital, the district hospital, the tehsil hospital and the rural medical centres associated with health units will be introduced. By the end of the 2nd Plan period, there will have been a considerable increase in the number of hospitals and dispensaries. A large number of health units, many of them integrated with maternity and child health centres, will have been set up in the National Extension Service and Community Projects and other areas. Malaria control, filaria control, tuberculosis control and leprosy control will have been intensified in all their aspects. Rural and urban family planning clinics will have been set up in a number sufficient to serve a great part of the population. The Plan provides for Rs. 267 crores in all, for health.

Obviously enough, very many qualified medical practitioners will be required, especially in rural areas. In fact, there is already a fairly widespread shortage in this occupation.

In spite of a far better state of national health in the U.K. there is one medical practitioner for every 1,000 people. Unfortunately we have, with much worse health conditions, only 70,000 qualified medical practitioners in India. As against this num-

ber, the minimum norm we are aiming at, for the present, is about 90,000. But in the context of the facilities available for medical education existing at the commencement of the 2nd Plan, only about 12,500 will qualify during the Second Plan period.

Training facilities at both graduate and post-graduate levels are being expanded, both qualitatively and quantitatively, and it is hoped that it will be possible to increase the annual admission to medical colleges by about 500. Even then the supply will lag behind the requirement.

All qualified medical practitioners entering the employment market during the coming years are therefore sure to be absorbed.

FURTHER INFORMATION may be available from:—

- (1) The Directorate-General of Health Services, New Delhi.
- (2) The State Health Directorates.
- (3) Institutions of Medical Education and Research
- (4) Universities.
- (5) The Medical Council of India, New Delhi.
- (6) The State Medical Councils.
- (7) The Education Ministry, New Delhi.
- (8) The Indian Medical Association, Delhi.
- (9) Employment Exchanges.

(Courtesy: Union Ministry of Lab. & Emp.)

FORTHCOMING EXAMINATIONS

Indian Navy Examination, July 1961

The Union Public Service Commission will hold an examination at Allahabad, Bangalore, Bhopal, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Madras, Patiala, Shillong, Srinagar and Trivandrum commencing on 11th July, 1961 for selection of Special Entry Cadets for the Indian Navy.

Age Limits: Candidates must have been born not earlier than 2nd July, 1942 and not later than 1st July, 1944. **These age limits can in no case be relaxed.**

Qualifications: Intermediate or equivalent. Applications from candidates who have appeared or intend to appear at Intermediate or equivalent examination acceptable provisionally.

Application forms and full particulars obtainable from Secretary, Union

Public Service Commission, Dholpur House, D.H.Q., P.O. New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. Candidates must clearly state on money order coupons **"Indian Navy Examination, July 1961"** and **also give their name and full postal address in block letters.** Postal orders or cheques or currency notes will not be accepted in lieu of money orders. Application forms and connected papers are also obtainable free from the nearest Naval Office. **Only unmarried male candidates can apply for admission to this Examination.** Completed applications must reach Union Public Service Commission by 27th March, 1961 (10th April, 1961 in the case of candidates residing abroad.)

Army Medical Corps Examination, 1961

The Union Public Service Commission will hold an examination at various places, commencing on 26th July, 1961, for recruitment of Civilian Doctors for Direct Permanent Regular Commissions or Short Service Regular Commissions in the Army Medical Corps. Women are also eligible to compete.

Age Limits: Candidates must not have attained the age of 30 years on the 31st December, 1961. This age-limit is relaxable in favour of candidates possessing Post-Graduate Diploma or Higher Medical qualification or having previous Commissioned Service in the Army Medical Corps.

Qualifications: A candidate must possess an Indian or Foreign Medical qualification recognised by the Indian Medical Council and be registered on any State Medical Register.

Application forms and full particulars obtainable from the Secretary, Union Public Service Commission, Dholpur House, D. H. Q. P. O. New Delhi-11, by remitting Re. 1.00 by Money Order or on cash payment at the counter. Candidates must clearly state on Money Order coupons **"Army Medical Corps Examination, 1961"** and **also give their name and full postal address in block letters.** Postal Orders or cheques or currency notes will not be accepted in lieu of Money Orders. Completed applications must reach the Union Public Service Commission by 3rd April, 1961 (17th April, 1961 for candidates residing abroad).

EDUCATIONAL FORUM

CORRESPONDENCE COURSES FOR HIGHER EDUCATION

The Government of India has decided to launch a scheme of correspondence courses and evening colleges in the Third Plan.

To begin with, this facility will be given to 60,000 students of whom 40,000 will be expected to join the evening colleges and 20,000 will receive instruction through correspondence courses. Assistance will be provided for opening of 100 evening colleges and departments of correspondence courses in ten universities during the Third Plan. The duration of courses in the evening colleges is proposed to be four years while that of correspondence courses is to be five years.

The Union Education Minister Dr. K. L. Shrimali, who spoke of this scheme in his presidential address at the 28th meeting of the Central Advisory Board of Education in New Delhi on January 16, said he was aware of the fear that correspondence courses might lead to a lowering of standards. But experience in other countries showed that where proper precautions had been taken and suitable preparations made, the results were not at all unsatisfactory.

In Australia correspondence courses covered all stages of education and at the university level, they had been in operation for more than half a century. In the U.S.S.R. about a million students got both professional and liberal education through correspondence courses. In the U.S.A. about a million and a half were being educated and trained through home study lessons and correspondence courses.

Dr. Shrimali said that the scheme would meet an important need of those who could not attend day and full-time institutions because of the necessity to earn a living or those who lived away from college and university locations.

MEDIUM OF INSTRUCTION IN UNIVERSITIES

The use of a single language as the medium of instruction in all universities in the country is stated to have been strongly

urged at the meeting of Advisory Board of Education in New Delhi on Jan. 17, 1961.

During a keen discussion on the pace of replacement of English by regional languages several members are reported to have pointed out that in the present context of linguistic passions a multiplicity of languages as media of instruction all over the country would be harmful. Nobody mentioned English, but if it is accepted that one language should be the medium all over the country it would clearly be English for some years to come.

Although it was generally accepted that the ultimate objective should be the replacement of English by regional languages, some members seem to have expressed doubts whether it could be done in the immediate future without impairing standards. They wanted the country to hasten slowly in this respect. Stress was laid on the need for adequate preparation by the universities and State Governments before effecting the change.

No decision was reached on the subject and it was agreed that the Board should meet later in a special session to examine the issue.

BASIC EDUCATION SYSTEM NEEDS REFORM

Mr. Yash, Deputy Education Minister, said in Chandigarh on January 20, that the basic system of education was fundamentally sound but required remodelling to be in tune with the scientific developments of the modern world.

He was inaugurating the "Basic Education Week" at the Government Post-Graduate Basic Training College.

Mr. Yash said the basic pattern was adopted about 15 years ago. During this period it had neither made any substantial progress, nor caught the imagination of the people.

This indicated, he said, that the system had neither been adopted nor implemented honestly. He said it had not kept pace with the changing times. If basic education was to achieve its objective it must not be stagnant.

The system, he added, was basically good because it inculcated in the student the dignity of labour and tried to develop an integrated personality.

Pointing out some of the contradictions and confusions he said, to insist on examination was contrary to the fundamental principle of basic education.

Explaining his point, he said, a student might be good at one subject but bad at another. There was no justification in treating him as a failure for his inaptitude for one subject.

Mr. D. P. Nair, Director of Basic Education in the Planning Commission, said the importance of basic education had increased because of the significant decision taken by the Central and State Governments to impart primary education on the basic pattern.

* * *

COMPULSORY PRIMARY EDUCATION IN PUNJAB

The Punjab Government has decided to introduce compulsory primary education for children in the age group six-to-seven-years throughout the State, except in the districts of Spiti and Lahaul, bordering western Tibet, from the next academic year beginning in July, 1961.

Speaking about basic education which is to be the main system of primary education, the Punjab Education Minister, Mr. Amar Nath Vidyalkar, said the aim of this system was to foster and develop the students' creative powers and endow them with imagination and initiative.

Mr. Vidyalkar, who was inaugurating the "basic education week" at Patiala on January 20, said the basic system had the merit of producing a lasting impression on the minds of students while the existing conventional system was examination-ridden.

Students unlearn half the things as they came out of educational institutions, he said.

The Minister emphasised the need for creating an atmosphere of love and affection in educational institutions and giving students freedom to think, express, play and act. He said if they were relieved of text books up to the primary stage, it would help in promoting the creative urge in them.

The failure of certain basic education institutions, he said, was mostly due to the fact that the teachers, though trained, had not given up the traditional way of teaching. They should adopt the basic way of teaching to avoid education being reduced to a mechanical routine.

The basic system, he added, related the needs of education to its aims and the educational practices to the demands of national life.

"The real aim of education", he observed, "is to bring out the creative talent in every child. The first task of a teacher is to understand the child and assess his potentialities. This does not presuppose advanced knowledge of psychology and theory although that can help and facilitate the task. What is essential is that our teachers must be interested in making some contribution to carving human material and the creation of a new world which is gradually shaping itself."

"To him", he added, "basic education methods appeared to constitute the best technique for the achievement of such objectives. It gives the pride of place to experience. Knowledge and literacy are subordinated to life's activities."

Mr. Vidyalkar emphasised that the child has an urge to learn and to ask questions. We should help the child to study nature and his environment.

He deprecated too much dependence upon books. Teachers themselves must possess a large fund of information in order to quench the child's thirst for knowledge.

* * *

PUNJABI UNIVERSITY AT PATIALA

It is reliably learnt that the Punjabi University Commission has recommended the location of the university at Patiala.

The Commission is reported to have finalised its recommendations. These will be submitted to the State Government soon. A Bill incorporating the recommendations is expected to be moved in the budget session of the Vidhan Sabha, beginning on February 25.

The Commission has recommended that it should be a residential university; no institutions should be affiliated to it.

It has suggested that it should be a multifaculty university. These should include the faculties of science, engineering, agriculture, medicine and arts.

Efforts should be made to impart instruction as far as possible, through the medium of Punjabi. In view of the difficulties to be faced in implementing this recommendation, the Commission has suggested the establishment of a bureau to facilitate translation of various textbooks into Punjabi as early as possible.

* * *

3-YEAR DEGREE COURSES ONLY FOR 16 PLUS

The University Grants Commission has decided to recommend to universities that the minimum age for admission to the first year class of the three-year degree course should be at least 16 plus.

In a press release issued in Mysore on December 31, 1960, after its two-day meeting, the Commission said that it was long felt that Indian university students were much less mature than students in other parts of the world and it was therefore considered desirable to prescribe a minimum age for admission to colleges.

The Commission expressed the view that it would be more desirable if universities fixed a minimum age for admission even at 17 plus.

While the Commission felt that eventually the medium of instruction would have to be changed over to the regional languages it held that there should be as little disturbance of standards as possible. Steps should also be taken to maintain inter-university contacts.

The Commission considered a report on general education in universities prepared by a special committee assisted by Dr. Hans Simons, whose Services had been lent by Ford Foundation and also heard him. Members of the Commission felt that general education implied not only broadening the base of education but also a new approach to knowledge itself and to the method of teaching. The Commission decided to set up a standing committee for the introduction of general education course in universities gradually.

The Commission decided to suggest to universities that they either abolish the third class at the Master's degree stage or permit students who were placed in that category to reappear for the examination, as candidates placed in third class could not now find suitable employment, particularly as teachers.

The Commission also approved of the creation of the Sir. C. V. Raman professorship in physical science at Madras University.

This was the last meeting of the Commission over which Dr. C. D. Deshmukh presided as Chairman.

* * *

CHANGE URGED IN QUESTION PAPERS

The three-day All-India English Teachers' Conference ended its deliberations at the Convocation Hall of Delhi University on Dec. 30, 1960, with an appeal for a change in the type of questions posed at various examinations.

The present trend of asking stereotyped questions had given rise to the evil of cramming. The students generally expected a set of particular questions at the examinations and they adopted the easiest course of "learning by heart the answers provided in guide books." They invariably ignored a thorough study of text-books.

* * *

LESS EMPHASIS ON PERSONALITY TEST

The total marks for the personality test in the IAS and IFS and central services Class I examinations are likely to be reduced soon by 50 per cent.

The Central Government have already referred a proposal to this effect to the Union Public Service Commission for its advice.

Previously, a candidate had compulsorily to get through the personality test for selection to these services. This condition was, however, waived two years ago, as it was found that many candidates who had done exceedingly well in the written papers failed for not securing the requisite marks in the viva voce.

Most of the candidates who passed the personality test and were subsequently selected were those belonging to well-to-do families and who had received education in English schools. They had always an advantage over other candidates.

The marks prescribed at present for the personality test are 400 in the case of IAS and IFS and 300 for central services examinations. As these are considered "too high," it is now proposed to reduce them to 200 and 150.

Readers' VIEWS

PROBLEM OF WORLD PEACE

Sir,

World peace has never been so necessary as it is today because we are living in a nuclear age. War means complete annihilation of humanity. We are sitting on the mouth of a volcano. It may erupt at any time and engulf us all. According to Pandit Nehru, peace is hanging by a slender thread. He has recently warned us that the situation is going from bad to worse. If we fail to bring about disarmament at this stage, we shall not be able to control the situation after the lapse of a decade or so when other small countries will also be armed with nuclear weapons.

The present atmosphere of the world is surcharged with suspicion and tension. It reflects the ingrained hatred and jealousy we harbour for one another. Hatred and jealousy are more dangerous than Atom and Hydrogen bombs. When they reach the boiling point, war breaks out. If we want to save the world from this impending catastrophe, we have to create an atmosphere where hatred may be replaced by love and competition by co-operation.

It is our lack of tolerance that is aggravating the situation. We have been and are trying to impose our ideologies and social systems on others. Communist countries want to develop Communism at the cost of Capitalism and vice-versa. China has been continuously saying that war is inevitable. It is our intolerance that is at the root of the prevailing tension and cold war. One thing that they seem to have forgotten is that every ideology and every social system has contributed to the common treasury of culture and civilization.

The narrow nationalism has always been responsible for wars. It was narrow nationalism that caused the Second World War also. There are still some countries that are suffering from the worst kind of narrow nationalism. They have posed a great problem for us. The pressing need of the hour is that we should think from international point of view. If we do not do so, we shall be digging our own graves.

The present world is divided into two folds—the Communist and the Capitalist. The destiny of humanity lies in their hands. It is a matter of great regret that both of them betray sincerity. The greatest proof of it is that on the one hand, they say that they are trying to accomplish world peace, on the other they threaten each other. It is beyond any shadow of doubt that if they work sincerely, their efforts will fructify. So far as the uncommitted countries are concerned, they are vacillating. They are unable to exert their moral influence effectively.

Jhansi,
13-1-61.

Hamidul Hasan.

TEARS AND PLATTITUDES

Sir,

The leading political parties, except the Communists, viz. the Congress, the P.S.P. and the Jan Sangha have all bewailed the fissiparous tendencies manifesting in our National life and expressed grave concern for National Unity at the annual session of their respective bodies which concluded recently.

We are sick of all these platitudes and tears and of the annual routine performances of our leaders. We demand that they act up to their professions and take concrete step to translate their noble sentiments into acts.

Will they do so or go back home and sleep over their pious wishes and, perchance, work underhand to sabotage the same by forging devices to keep out from the administrative life of their areas Indian from other regions, so that their Kith and Kin may thrive unhampered?

Let them bring into being an India where an Indian may feel that every inch of the soil from Himalayas to the Cape Comorin and the Arabian Sea to the Bay of Bengal is his motherland and that he can live and walk with his head erect anywhere in this vast homeland without being discriminated.

If our leaders lack either the will or the courage to do this, all their planning will be in vain.

In spite of all their Five Year Plans, their dreams will fall like a house of cards as did the Empires of the Mauryas and of the Moghuls. Let the lessons of History be not lost upon them.

Casteism is bad, but regionalism is worse, because caste at least recognises no regional barrier.
Kharagpur. Lala Baikuntha Lall.

FALLACY OF 'ISMS

Sir,

Among the 'Isms, provincialism coupled with linguism are probably the deadliest venoms that are sapping the vital interests of national unity and solidarity. The basic reasons are poverty and political mechanisms. For, more you talk about it, and, one decade of Independence has proved the method more destructive than constructive. There is a strong feeling that we are circumscribed by narrow ways of living. If charity begins at home, surrounding narrowness has to be widened by way of tolerating each other's day to day living. The only panacea to make such living a better one is by making marriages a most tolerant affair among all communities. This is largely in force among upper class of people.

At the present juncture we have come to such a stage when economic livelihood has been forming the pivot of our social life and orthodox social customs are withering day by day. Nobody would like to see Malayalees living in Delhi and Bombay, or Bengalees living in Bihar and Assam, or Oriyas living in Bengal, make pockets distinctive of their own and live in sectarian ways. The government and the progressive social reformers should start institutions and make funds and see that marriages among different communities and provinces are encouraged and married couples do not face economic starvation. Will the administration and the well-wishers of India make a trial of this humble suggestion?

Balasore, Yours faithfully,
12-1-1961. Radha Benode Mukherjee.

A LOVELY MAGAZINE

Sir, really, your journal is a journal of prolific journalisms in news and views, modern-styled in language and literature, and a plain gateway of world-culture in the glimpses of unknowns.

It is not a marvel to speak that the magazine is an indispensable factor of help among the students' community of all ages to fight shy of their dreams and hopes. Your noble magazine will, I hope, bestow upon them a fare knowledge information.

(Hirendranath Gogoi, Dibrugarh)

A LITERARY BOON

Sir, I deem it as an honour and privilege to bring to your kind notice the fact that your magazine maintains uniformly high standard of literary and educative value. At a time when the dearth for the right type of magazine, to serve as beacon to the aspiring candidates, is felt in the high literary circles, "Careers and Courses", with its condensed wisdom and interesting exposition of the complicated issues of day to day politics from the view point of history, comes as a welcome relief.

I am confident that the magazine has succeeded in its noble mission, and that it has a rosy future full of promises.

(Radhakrishnan Nair, Trivandrum)

READING A MAGAZINE

Sir, students who are wishful of reading a magazine, dealing with 'current topics' and enabling them to lead a 'better career' in future and who are desirous of securing good prospects in life, must look for 'careers and courses', in as much as the way in which topics of varied nature are being treated, is indeed commendable.

The journal enlarges the mental outlook of every reader; it stands as a guidepost to those who go through it. It is no exaggeration to say that it is a repository of vast knowledge of current facts and figures.

I extend my heart-felt and sincere felicitations to you—the editor of this pre-eminently good journal.

(M. Agni, Madras)

ENORMOUS MINE OF KNOWLEDGE

Sir, I have been a regular member of your esteemed journal 'Careers and Courses' for the last one year. Truly speaking, I do not find words adequate enough, in the dictionary to express my gratitude for your informative journal. It will not be an exaggeration to say that, this container of world-wide informations, is a mint of pearls to the seekers of knowledge.

(J. R. Kainthola, Dehradun)

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

WORLD BANK AID TO INDIA

The World Bank had extended loans totalling \$662,100,000 to India since 1948.

In a summary of its operations in the region, the Bank on Dec. 8, 1960 reported that its first loan in Asia was \$32 million made in 1948 to buy locomotives and rolling stock for the Indian Railways.

Its most recent loan was \$90 million in last September 19 for the Indus river development project in India and Pakistan.

It said it had made loans totalling \$1,444,800,000 to eight countries in the region since 1948.

The Bank said that the loans, amounting to well over a quarter of its loans to all member countries, have been concentrated on the development of basic services.

Loans to develop road, rail, sea and air transportation in the eight countries amounted to almost two-fifths of the total. Electric power and industrial development each accounted for about one-quarter. Agriculture represented the balance.

The Bank said its investments for some 60 projects in Asia had helped the expansion of basic services which had permitted and stimulated industrial and commercial expansion.

£5 m. U.K. CREDIT FOR INDIA

An agreement for a credit of Rs. 6.67 crores (£5 million) from the Government of the United Kingdom to the Government of India was signed in New Delhi on Dec. 31, 1960.

The main features of the agreement are that the loan is not tied to any project—it can be utilized for a broad range of imports from the U.K. during the current year—and is repayable in 20 years, the first instalment falling due on November 30, 1966.

With this, the British Government's

assistance for the second Five-Year Plan totals a little over Rs. 107 crores.

The rate of interest will be the same as that currently applied by the U.K. Treasury to a loan for a comparable period out of the British consolidated fund on the same date plus one-fourth of one per cent for administrative charges.

The High Commissioner said that for the third Plan, the U.K. Government expected to provide aid amounting to Rs. 66 crores—Rs. 40 crores as an initial act of assistance for capital goods from Britain required for the Plan and another Rs. 26 crores for the extension of the Durgapur steel project.

FIVE U.S. RESEARCH GRANTS FOR INDIA

Grants totalling nearly \$370,000 have been made to finance research at scientific institutions in India, Britain and Italy, U.S. Agriculture Department announced in Washington on Dec. 22, 1960. There were a total of seven grants, five of which went to India. They were made in local currencies earned by the U.S. for its sale of agricultural surpluses.

Three of the grants to India, with a total value of \$148,933, went to the Forest Research Institute at Dehra Dun. One will support a study of the processing qualities of India timbers; another will be used for an investigation of wood durability; and the third is for investigation of the termite resistance of woods.

A fourth grant of \$51,347 went to the National Dairy Research Institute at Karnal, Punjab, to support a study on the isolation and use of enzymes produced by micro-organisms that coagulate milk in cheese manufacture.

The Agricultural College and Research Institute at Ludhiana got a grant of \$34,663 for a study of the acarine disease problem in honey bees. All the grants to Indian organizations were for five years.

CANADIAN GRANT TO INDIA

The Canadian Government has allocated a grant of \$25 million for capital assistance to India under the Colombo Plan during the current financial year—1960-61.

In a statement, Mr. Churchill said that out of this grant, which had been approved by the Diefenbaker Cabinet on the eve of his departure for India, Canada had undertaken to provide India capital assistance of \$11.7 million; a final grant of \$6 lakhs to complete the Canada-India atomic reactor at Trombay; wheat of the value of \$7 million; and an initial contribution to the foreign exchange costs of the third stage of the hydro-electric project in Madras State to the tune of \$3.5 million.

IDA ASSISTANCE FOR INDIA

The recently formed International Development Association will advance loans to India to the extent of \$50m. (about Rs. 27.75 crores) during the Third Plan period, it is learnt.

The main feature of IDA assistance is that the loans can be repaid in rupees.

As in the case of the Second Plan, India is seeking World Bank help for the development of railways, ports like Calcutta, Bombay and Haldia, for power projects in the Damodar Valley and Koyna. Help is also being sought for raising the coal output in the private sector.

So far, the World Bank has advanced loans to India totalling Rs. 312 crores for various projects both in the public and the private sectors.

CONSTRUCTION OF BHILAI STEEL PLANT COMPLETED

With the commissioning of the Merchant Mill—the last of the rolling mills—the construction of the entire Bhilai Steel Plant has been completed. This mill will turn out 2,55,000 tons of finished steel every year.

Bhilai Steel Works are designed to produce annually one million tons of steel to be rolled into 770,000 tons of marketable products including rails and railway bars, beams and other heavy structurals and billets for re-rolling mills. Capacity of the plant will be expanded to 2½ million tons under the Third Five Year Plan.

Meanwhile the Bhilai Steel Works had produced upto December 1960, about 973,000 tons of pig iron and 340,000 tons of

steel. About 565,000 tons of pig iron and 245,000 tons of steel products have been despatched to consumers all over India. About 96,000 tons of pig iron and 15,000 tons of steel billets have also been exported from Bhilai to Pakistan, Japan and United Kingdom.

WHO NOW HAS 104 MEMBERS

The Republic of Somalia has now joined the World Health Organization by depositing with the Secretary-General of the United Nations a formal instrument of acceptance of the WHO Constitution. This brings the number of states who are full members of WHO to 104. There are also two Associate Members: Sierra Leone and the Federation of Rhodesia and Nyasaland.

Somalia is the thirteenth newly-independent African republic to become a full member of WHO during the last six months. The other twelve are:

Chad, Central African Republic, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, the Malagasy Republic (formerly Madagascar), Mali, Niger, Nigeria, Senegal and Upper Volta.

Of the foregoing, all except Chad, Dahomey, Malagasy and Somalia had earlier been admitted as Associate Members of WHO.

The Togolese Republic and Cameroun also became full members of WHO in May 1960, during the 13th World Health Assembly.

All these new African States sent their delegates to the Fourteenth World Health Assembly which opened at Vigyan Bhavan New Delhi on Tuesday, Feb. 7, 1961.

The Fourteenth Assembly also considered an application for membership from the Islamic Republic of Mauritania, and applications for the admission to Associate Membership of Tanganyika and Ruanda Urundi.

U.S. POPULATION

The population of the United States totalled 179,323,175 on April 1, showing an increase of 27,997,377 or 18.5 per cent, over the total of 151,325,798 ten years ago, according to the Commerce Department of United States.

Officials estimated the population figure would exceed 180 million when Servicemen and other Americans overseas were added.

The population increase and the shifts will lead to a redistribution of seats in the House of Representatives, with California, the fastest growing State in the nation, gaining the most. Sixteen States will lose seats and nine will gain them.

UNESCO RESEARCH CENTRE IN NEW DELHI

The UNESCO Research Centre on Social and Economic Development in Southern Asia will continue its activities for a further period of four years from 1961 to 1964 under an Agreement signed in New Delhi on Feb. 4 between UNESCO and the Government of India.

Located now in New Delhi the Research Centre was started initially in Calcutta in January 1956. The principal tasks of the Centre have been to collate and interpret the existing research material on the social sciences; provide documentation to assist social scientists to co-ordinate their work; undertake pilot studies to stimulate further research; organise research on behalf of Governments, Universities and other institutes and provide training facilities for research.

The terms of reference of the Centre have been recently extended to cover research activities on the economic and social development of South Asia in general.

CHAD IS UNESCO'S 99TH MEMBER STATE

The Republic of Chad became the 99th member state of Unesco at the end of 1960.

Seventeen other countries, most of them in Africa, joined Unesco during 1960. They are: Cameroon, Central African Republic, Congo (Brazzaville), Congo (Leopoldville), Dahomey, Gabon, Guinea, Ivory Coast, Koweit, Madagascar, Mali, Niger, Nigeria, Senegal, Somalia, Togo and Upper Volta.

INDIA'S FIRST WATCH FACTORY

Work on first watch factory in the public sector was inaugurated in Bangalore on January 28, 1961.

To start with the factory will turn out 65,000 watches in the first year. Soon, output will go up to 240,000 and with an increase in shifts, the turn out can be made even larger to meet the needs of the market.

A Japanese company is giving techni-

cal help for the project. In four years' time, over 80 per cent of the components will be obtained from home production.

The watch factory will be an auxiliary to the State owned Machine Tools factory.

PROGRESS OF INDIAN TERMINOLOGY

The Central Government has so far evolved about 220,000 scientific and technical terms in the major Indian languages.

Progress has been the most speedy in terms relating to defence (25,089), while in science subjects the evolution of suitable terms has had varied success.

In Chemistry, 13,972 international terms have been tamed to Indian needs, but in electrical engineering, on the other hand, only 1,104 have so far proved susceptible to similar treatment.

The Central Hindi Directorate is preparing a directory of these terms with the help of nine editors and a large technical staff.

The work of evolving this terminology from terms which have gained international currency is largely in the hands of some 30 expert committees. Terms selected by them are sent to the different linguistic areas for comment and later finalised by the Board. Scientific Terminology has to secure the Cabinet approval.

DIESEL TRACTORS TO BE BUILT IN INDIA

A manufacturing licence to produce in India the Diesel tractors of Massey-Ferguson Ltd., of Coventry, England, has been issued to Tractor and Farm Equipment (Private) Ltd., Sembiam, Madras. Massey-Ferguson has a substantial minority interest in the newly formed company.

A spokesman for the British firm said that initial production would be at the rate of 3,500 tractors yearly on a single-shift basis. The first model to be produced will be the MF-35, a medium-horsepower tractor of which there are already some 16,000 operating in India.

The Indian company is to build a modern plant near Madras. Plans provide for complete indigenous production after the first two or three years. The programme, in which agricultural implements will progressively be included, is expected to offer employment eventually to about 3,000 people.

FILM WORLD

AKADAMI AWARDS FOR 1960-61

At a meeting of the Central Sangeet Natak Akadami held in Madras on December 28, with Mr. P. V. Rajamannar, Chief Justice of Madras and Chairman of the Akadami presiding, it was decided to give the Akadami awards under the various categories for 1960-61 to the following:

Film: Acting—Lalita Pawar, Lyric composer—Pradeep, and Script Writer—Mukham Sharma.

Drama: Playwright: Prabhulal Dwi-vedi; and Director, Kasambhai Mir.

Regional language theatre: Telugu—Sthanam Narasimharao; Assamese—Nrityadeo Mahanti; Kannada—Subbaiah Naidu, Punjabi—Seela Vatsa, and Oriya—Samuel Sahu alias Babi.

Dance: Kathakali—Ramunni Nair, Manipuri—Amudon Sharma; Traditional—Bapu Khude Narayanagavkar and Vedantam Satyanarayana.

Music: Hindustani vocal—Mirashi Buwa; Hindustani instrumental—Kanth Maharaj, Karnataka vocal—Mudikondan Venkatarama Iyer, and Karnataka instrumental (flute)—Mr. T. N. Swaminatha Pillai.

* * *

BIOGRAPHICAL FILM OF M. GANDHI

Production of a 12,000-foot biographical film of Mahatma Gandhi being produced by the Gandhi Smarak Nidhi in collaboration with the Films Division of the Government of India, is making good headway.

Disclosing this to Press men recently, Mr. R. R. Divakar, chairman of the Gandhi Smarak Nidhi, said that the organisation had on its hand 25,000 feet of filmic material on the subject collected from all over the world and included 15,000 still photographs, 25,000 letters written by Gandhiji and 50 hours of recorded voice. Efforts were being made to fill up the gaps in the film in respect of his days at the Inner Temple in England, the prison life in South Africa, and India. In view of the complicated nature of the material, no definite date had been fixed for the completion of the film.

INDIAN FILM FOR "OSCAR" CONTEST

The Film Federation of India has recommended K. Asif's "Mughal-e-Azam" as India's entry for the Hollywood "Oscar" in the foreign films category. This recommendation was made recently after a special screening of the film at Vahuni Studios in Madras. Another film shown was Cine Art Productions' "Ganga," in Bengali, directed by Rajen Tarafdar.

* * *

RUSSIA LIBERALISES IMPORT OF FOREIGN FILMS

Nearly 100 films made in other countries, like Britain, France, Italy, Greece, Norway, the United States, India and Japan will be shown in the Soviet Union this year.

The American Film, "In Old Chicago," which was shown in the Soviet Union 15 years ago, will again go into general release this year.

Many of the new films denounce war and fascism. The French film, "Verdict" and the Italian film, "It was Night in Rome," are devoted to the theme of war and peace.

The Chinese film, "Sisters on Ice," which the Soviet cinemagoers will see this year is devoted to new morals, friendship and comradeship. Hungarian films, "Mad" and Indian picture, "Four Roads," and French films, "Le Comte de Monte-Cristo" and "Jervese" will be also shown.

* * *

AWARD ON BASIS OF AUDIENCE RESEARCH

The National Audience Board of New York announced recently the creation of a new "Award of Merit" for film, television and radio material on the basis of audience research studies conducted by the Board. In the case of movies, the award will go to both the winners' producing and distributing companies.

A movie will be evaluated on about 10 different points, including the quality of performances, story content and camera work. The National Audience Board, a non-profit, independent organisation, has

conducted entertainment evaluation, on client assignment, since 1954.

"THREATS" AGAINST U.K. CENSOR BOARD

Britain's film censor chief, Lord Morrison of Lambeth, the former Labour Home Secretary and Foreign Secretary, has alleged that certain film producers have made threats which "some people would call blackmail" to try to get censorship decisions changed.

He said he would not himself go so far as to call it blackmail but said there was a threat of coercion by producers or film owners who had warned of readiness to campaign against the British Board of Film Censors, unless there was a change in its decisions.

Lord Morrison refused to name producers concerned but indicated his refusal to surrender to threats. "If we did so we would not be worthy of our jobs and would bring discredit on the board."

GLASS-SPRAY FOR SET MAKING

A £1,000 (Rs. 113,333) gun, which sprays fibre-glass for the first time has brought "revolutionary" advantages in set construction and in the building of props hitherto made from plaster.

Sprayed fibre-glass has at least six advantages over plaster. It is cheaper, more durable and can be nailed. It is impervious to weather—an enormous advantage on outdoor sets. Unlike plaster, it does not chip or crumble and is permanently storable. It is much lighter than plaster—one man can lift a fibre-glass coated column which would need three men to carry in plaster. Fibre-glass is cleaner, quicker and easier to work with.

Another practical advantage is that colouring can be added to the fibre-glass when it is sprayed into the mould. Colouring goes right through the material and cannot wear off. So repainting is never necessary.

Moulds are made in the same way as for plaster casting. Then the machine is fed with resin and lengths of glass-fibre. It automatically shreds the fibre and simultaneously mixes and sprays on to the mould.

ACTOR TO PORTRAY JAPANESE EMPEROR

For the first time in history, permis-

sion has been granted for the Japanese Royal Household to permit an actor to portray the role of the Emperor on the screen. The role, in "Bridge to the Sun," went to Mr. Shin Kido, prominent in Japanese motion pictures and television.

Kido is the key figure in a scene showing a parade of the royal guards and horsemen "shot" outside the world-famous Nijo Palace. The palace was built by Tokugawa Ieyasu, an ancient Japanese Emperor, to serve as his residence on his visits to Kyoto.

RISE IN WORLD CINEMAS

The importance of the motion picture industry's overseas markets was highlighted by a Department of Commerce survey of the world's movie theatre capacity.

During the period from 1955 to 1960, the total theatres in the world equipped to show motion pictures jumped from 119,982, with 59,862,886 seating capacity, to 154,852 theatres, seating 78,826,349. There was an increase of 29 per cent in theatres and 234 per cent in seats.

Significantly, increases took place despite a net loss of 2,000 theatres with 1,000,000 seats in the United States—drops of 24 to 21 per cent, respectively. Only the United States, Canada and Hawaii showed a decline.

The Far East led the increase with 15,697 theatres seating 8,000,000 persons compared to 9,735 theatres seating 5,500,000 five years ago.

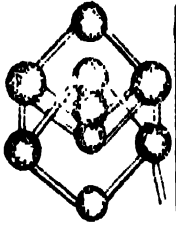
Over all, 60 per cent of the total screen time was occupied by films.

NEXT ASIAN FILM FESTIVAL

Preparations are under way for the eighth Asian Film Festival from March 7 to 11, 1961, to be held in Manila. Meanwhile Seoul has been tentatively chosen as the site for the 1962 Asian Film Festival.

The formal decision about the site of the 1962 Asian Film Festival is expected to be taken at the general meeting of the Asian Film Producers' Federation to be called immediately after the end of the eighth Film Festival in Manila.

It is recalled that the Asian Film Festival has been held so far three times in Tokyo, and once each in Manila, Singapore, Hong Kong and Kuala Lumpur.



SCIENCE & INVENTION

ELECTRICAL ANAESTHESIA

A surgical team at Jackson, (Mississippi) U.S.A. has used a \$150 (£55 sterling) electronic device to anaesthetise a woman patient successfully. Authorities at the University of Mississippi Medical Centre said on Jan. 15, it was the first time electrical anaesthesia had been used in the United States--and possibly in the world.

The device, a hospital spokesman told reporters last night was a frequency generator which developed a 700-cycle signal coupled to an amplifier connected in turn to the patient's temples by electrodes about an inch in diameter.

The patient was "under" within 30 to 60 seconds of switching on the anaesthetiser and took a similar time to recover when it was switched off.

RADIO-CONTROLLED BUS

A model of a radio-controlled passenger bus has been prepared by the students and teachers of the Kala Niketan Industrial Institute at Jabalpur.

The model, claimed to be the first of its kind in the country, is about ten inches long and propelled by a radio transmitter in all directions.

A demonstration of the model was shown to newsmen on Jan. 22 by the Principal of the Institute. The model is based on the theory of radar control for pilotless planes. In this case the theory has been modified and improved so that the bus could be controlled in multiple channels.

HYDROGEN CLOUD PHOTOGRAPHED

Two Marseilles astronomers, with the aid of a device that increased the sensitivity of their telescope 25 times, have photographed for the first time a hydrogen cloud located 26,000 light years from the earth.

The feat, accomplished with the telescope of the St. Michel Observatory in upper province was performed by Mr. Georges Courtes, Research Chief, at the French National Centre for Scientific Research,

and Mr. Paul Cruvellier, a researcher at the centre.

NEW METHOD OF BLOOD TRANSFUSION

Blood donors can have their blood returned to them after plasma has been extracted from it by a new method of transfusion, according to Dr. Allan Kliman, of the National Institute of Health at Washington.

Dr. Kliman told journalists on Jan. 6 the technique could expand the potential supply of plasma at least 30-fold in emergency.

Donors now can give a pint of blood yielding half a pint of plasma, every two months. The new procedure would enable the same person to give repeated donation totalling a quart of plasma in a week.

Dr. Kliman said in one case a quart of plasma was taken from a donor every week for nine weeks without apparent ill-effects. He said the new method offered a quicker and potentially safer means of aiding victims of leukemia and radiation sickness.

MOUNTAIN RANGES IN THE MARS

A Japanese astronomer has put forward the world's first theory that there are huge mountain ranges on the Mars of the Himalayan class, on the basis of observations of the upper air currents of the planet.

The astronomer is Dr. Shotaro Miyamoto, Director of the Hanayama Astronomical Observatory of Kyoto University. He has been studying meteorological phenomena of the Mars since May and checked his previous observations by means of the 60 cm. reflecting telescope specially designed for planetary observations.

He has located the biggest range at 51 degrees latitude and 310 degrees longitude in the Dios-Curia region stretching for 2,500 kilometers. He has found that there is high atmospheric pressure in the eastern part of the region and a warm, moist air current blows from the equator to the north. This causes clouds to be formed at all times and whenever there is no cloud

the place appears black. He has also located two other ranges of the Alpine and Tibetan plateau classes.

SPACE TRAVEL EFFECT ON LIVING BODIES

"The New York Times" reported on Dec. 4, 1960 that living organisms rocketed into space through the radiation belt surrounding the earth had been recovered in a state of apparent death, yet were capable of revival.

If confirmed by subsequent experiments the finding might mean that interplanetary space harbours influences at present unknown to science, it said.

The organisms—Neurospora, a form of bread mould, carried into space on September 19, 1960, in a rocket fired from the navy range at Point Arguellogn, California, spent 26 minutes inside the inner Van Allen radiation belt.

Dr. A. Gib Debusk, of Florida State University, was quoted as saying that when recovered the Neurospora failed to grow. It was in a hitherto unobserved state of dormancy he termed the physiological death.

Its life activities had ceased, but when he gave it a super-rich nutrient, it was jolted back into normal activity.

Space, concluded Dr. Debusk, "is a brand new environment."

LUNG CANCER CAUSED BY METAL IN TOBACCO

Any connection between smoking and lung cancer may be due to metal compounds in tobacco, Professor Hugh Nicol of Glasgow has suggested.

He considers that metallic compounds which are found in tobacco could originate from the soil where the leaf is grown, from spraying or during processing.

The countries which grow tobacco and not those where it is consumed ought to be probed for lung cancer statistics, he says. It is often pointed out that lung cancer had become particularly prominent in Britain in the past 30 years. It is only in this period that African tobacco has come on the British market in quantity, says Prof. Nicol. "This suggests that the process of growing or cultivating tobacco in Africa deserves examination."

UNUSUAL GALAXIES DISCOVERED

Unusual galaxies have been discovered.

covered by Byurakan Observatory in Armenia recently.

Academician Ambartsumyan, Chief of the Byurakan Observatory and President of the Armenian Academy of Sciences, told an "Ekonomicheskaya Gazeta" correspondent about its new investigations.

"The astronomical observatory at Byurokan was set up 15 years ago. These years have seen quite a number of important discoveries made by the Observatory. Among other things we have a 21-inch Schmidt reflector and a 16-inch reflector for stellar electrophotometry. Currently installation is being completed of the world's second largest optical Schmidt telescope.

The instrument research and development laboratory at Byurakan is working on new designs of astronomical instruments. One such instrument is the country's biggest radio telescope with an aggregate reflector area of about 4,500 square metres.

"Investigations into the Universe yield a wealth of information which throws light on the formation and development of giant stellar systems.

"For example, we have observed associations of galaxies which quickly form and relatively quickly dissociate in the Universe. Watching them we noticed the nuclei of some of those giant galaxies squirt blobs of matter emitting blue light. There is every reason to believe such "blobs" are newly formed stellar systems. Unfortunately, we have not been able to ascertain the mechanism of their formation. There is a body of opinion that they are ejected from the centres of galaxies by some explosion processes."

"There has to be a unity of interests, for astronomers here and abroad watch the same objects. It often happens that astronomers and astrophysicists make a discovery at one and the same time, though they arrive at it by different roads.

Scientists have established that supernova outbursts are traced to the rapid liberation of a huge amount of atomic energy inside an existing star. An outburst can enhance the brightness of the star several hundred million times. The true cause of such outbursts is among the most urgent problems facing modern astronomy."

ATOM-TIMED CLOCK

Information has been received of the

development of a new atom-timed clock. Called the Atomichorn, it is the "world's most accurate clock" (to within three seconds per 100 years). It uses the stability of the atom to measure time and has been found useful for precise timing of operations in such industries as precision instruments, electronic components time-pieces and broadcasting equipments. This atom-beam clock is about 7 ft. high and weighs 500 pounds.

REVIVING HEART WITHOUT SURGERY

A new, simple method of restoring heart beat without surgery, drugs or electric shock has saved the lives of several Americans, a magazine published in London by the United States Embassy claimed on January 15, 1961.

The magazine, "Science Horizons," said a surgical team at the John Hopkins University, Baltimore, devised the new method, which consists of pressing rhythmically on the lower part of the patient's breast bone and is no harder to apply than artificial respiration.

The article said a second person applying mouth-to-mouth resuscitation is advantageous but not essential, and the method will keep an inert heart pumping blood almost indefinitely.

The American Heart Association was planning a campaign to educate the public in the technique.

"Introduction of the massage aroused some scepticism among members of the medical profession in various countries because of its very simplicity," the article added.

"Surgical opening of the chest wall for hand massage of the heart is, of course, still being employed, but the problem with this method is to get the patient to the surgeon in time to save his life.

"The new form of massage can be done anywhere by anyone who has received rudimentary training in its application."

The article reported that the new technique was 100 per cent successful when applied to 20 patients—ranging in age from two months to 80 years—between May, 1959 and February, 1960. Fourteen were still alive.

Of the patients given closed chest massage since last July, three out of four survived without damage to the central nerv-

ous system, and the method had been wholly successful when used in the operating theatre.

HOW TO LAND A SPACE CRAFT SAFELY

How can a manned space craft be landed without turning it into a coffin? How did the U.S. and Russia land animals after a trip in orbit? How will the U.S. land our manned space craft?

The National Aeronautics and Space Administration in U.S.A. is investigating several strange ways to cushion landing shock. NASA scientists say interior "cushions" of a combination of semirigid plastic and aluminium honeycomb can absorb some of the jolt—but not all of it.

Therefore, the scientists are studying landing bags, bending legs, braking rockets and water.

They will use the easy water technique—water is softer than land so a floatable capsule is directed to drop into water—with the Mercury man-in-space project.

The bags studied for later use on land are of several types. One kind, a flattened round bag, has eight compartments each with a blowout patch so that air can escape from the bag, thus cushioning the space craft without bouncing it.

A vertical-cylinder bag and a spherical bag have also been tested. The bags could be carried at the base of the space craft but not blown up until needed for landing.

NASA has also tested metal legs that would bend more during impact and thus ease the craft's landing. The metal legs would be fixed between the craft itself and its heat shield. This method has been tested in simulated landing on concrete.

A few tests also have been made on a braking rocket. The results so far have been good, NASA reports.

FECUNDITY OF SPACE DOGS

The Moscow newspaper *Sovetskaya Rossiya* published on Jan. 20 a photograph of the space travelling dog Strelka with her progeny. The photo shows six fluffy pups crawling around the affectionate and contented Strelka. The mother and the pups are doing well.

Strelka gave birth to the litter five months after her space flight. ~~But~~

dog and her offsprings are under constant medical supervision.

Strelka's progeny is a proof of the great reliability of the equipment installed in the second Soviet space ship to protect living organisms against harmful effects in outer space.

Strelka was one of the two main passengers in the second Soviet satellite space ship, launched last August. She circled the earth several times at the height of approximately 320 kilometres in a giant space ship weighing 4,600 kilograms. On the 18th circuit, upon the completion of the programme of research, the order was flashed to the ship to start the descent. Equipped with special thermal defences, the satellite passed safely through terrestrial atmosphere.

For the first time in history, living beings, the dogs Strelka and Belka, returned safely to earth after a space voyage of over 700,000 kilometres.

SATELLITE COMMUNICATIONS TO HELP PRODUCE NEWSPAPERS

An electronics firm of New York has predicted that by 1962 a satellite communications system will permit a newspaper printed in the United States to be reproduced within minutes in any part of the world. Page by page, he said, the newspaper will be scanned by a band of light which will feed the image into an encoder. There the image will be broken up into video impulses and bounced off a space satellite to their destination, where the process is reversed to record the image on paper. The whole process will take only six minutes for a 90-page paper.

NEW METHOD TO CURE CANCER

A new method makes it possible for cancer-killing radiation to be injected into parts of the body almost impossible to reach by conventional means.

The technique, known as "after loading," was described at a radiological society of north America meeting at Cincinnati (Ohio). Doctors using it have been able to plant massive doses of radiation in the lung root, the back of the tongue and other hard-to-reach areas. They inserted catheters (long, hollow plastic tubes) through the body and into the tumor. Then the radioactive material—radium, for example—is

shot directly through the tube into the afflicted part.

CHEMISTRY OF THE BODY

The body consists of 65 per cent water, 30 per cent organic compounds such as proteins and fats, and 5 per cent minerals and salts.

It is this 5 per cent which is mainly responsible for keeping us in good health. These minerals—sodium, potassium, calcium, phosphorus, iron, magnesium, plus traces of other elements, combine with acids to produce the salts of the body.

Sodium combines with chloride (table salt) to regulate the amount of water in the body. It is the heart salt.

Potassium keeps the muscles in trim and many aches and pains may be due to a deficiency of this mineral.

Calcium is the element responsible for strong bones and teeth. It also prevents blood clots and helps the nerves and muscles to function properly.

Phosphorus is essential for the absorption of sugars and fats, while iron has the business of carrying oxygen round the body. Lack of it can cause anaemia, sore tongue, brittle nails, and general muscular fatigue.

UNDERGROUND OCEANS IN MARS

Professor Victor Davydov, the Scientific Secretary of the Sternberg Institute of Astronomy in Moscow, has advanced the hypothesis that the mysterious Martian canals are cracks in the thick ice crust of the Martian hydrosphere which is covered with the sands of lifeless deserts.

The ice is thinner around the cracks and the nearness of water softens the temperature of soil around them. As a result, relatively favourable conditions for the existence of vegetation should exist precisely along these cracks.

The Soviet astronomer has also arrived at the conclusion that there are no open water expanses on Mars. But he believes that the planet has "underground" oceans.

Developing this thought, Professor Davydov pointed out that because of great frosts, both the soil and water on Mars are frozen to a depth of many hundreds of metres. The entire planet is coated as it were with a thick layer of ice mixed with a sandy substance. Underneath this layer,

at the depth of one and a half kilometres at the equator and two kilometres at the poles, is water. "And if there is water there is vegetation, and possibly life", the scientist said.

SPACE EXPLORATION BY INDIA

India and the United States will jointly carry out a series of 40 to 60 high altitude balloon flights to study cosmic ray activity in equatorial regions. The flights will begin in April 1961 in Hyderabad and will be conducted jointly by the scientists of the two countries. The purpose of these flights will be to gain new knowledge of cosmic rays and their frequency in equatorial regions. Indian agencies scheduled to participate are the Indian Atomic Energy Department and the Institute of Fundamental Research of Bombay. The American organizations involved include the United States Atomic Energy Commission, the Naval Research Laboratory, the Air Force Research Laboratories at Cambridge (Mass.) and the General Mills Corporation.

FORTHCOMING EXAMINATION

Indian Administrative Service, Etc., Examination, 1961

The Union Public Service Commission will hold at various places, a competitive examination for recruitment to Indian Administrative and Allied Services, commencing on 6th October, 1961.

Age limits on 1-8-1961:—Indian Police Service 20-24 years; other Services 21-24 years; candidates, other than Scheduled Castes or Scheduled Tribes or residents of former French settlements or of Andaman and Nicobar Islands, not eligible to compete more than two times for each of the three categories of Services, but this restriction will apply only from the 1961 examination onwards; upper age-limit, however, relaxable in favour of Scheduled Castes, Scheduled Tribes, bona fide displaced persons from Pakistan, residents of the former French settlements which have now become part of India, candidates from the Andaman and Nicobar Islands and certain categories of Government servants.

Qualifications: I.A.S. and I.F.S.—A degree in Arts, Science (but not a science degree in Technology or Chemical Engineering), Commerce, Agriculture or in Civil, Mechanical or Electrical (including Tele-communication) Engineering or its equivalent; Law Degree, Poona, Gujarat and Karnatak Universities (Revised Course) acceptable. Law Degree Bombay University (Revised Course) with certain reservations and B.L. Degree of Andhra University also acceptable. Other Services—A Degree or its equivalent. Full particulars and application forms obtainable from the Secretary, Union Public Service Commission, Dhoolpur House, D.H.Q. P.O., New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. Candidates must clearly state on money order coupons "Indian Administrative Service etc. Examination, 1961" and also give their name and full postal address in block letters. Postal orders or cheques or currency notes will not be accepted in lieu of money orders. Completed applications must reach the Union Public Service Commission by the 10th April, 1961 (24th April, 1961 in case of candidates residing abroad).

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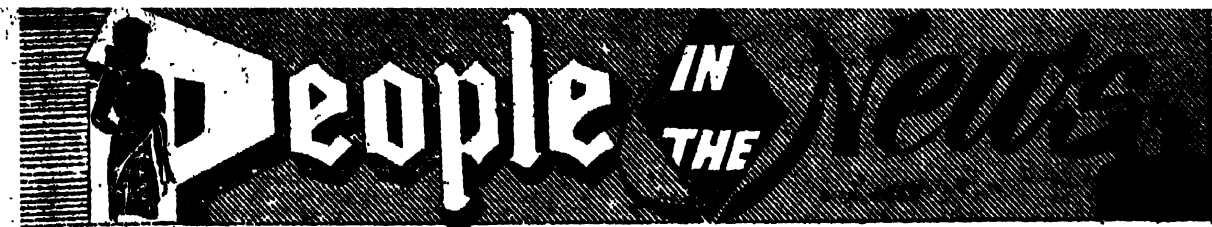
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DR. SRI KRISHNA SINHA

Dr. Sri Krishna Sinha, Chief Minister of Bihar, died in Patna at the age of 74 on January 31 after a long illness.

Dr. Sri Krishna Sinha was an able administrator, a polished parliamentarian and an eloquent orator and he had immense popularity among the people of Bihar.

Born to an ancient zamindar family of Bihar in October 1887 in Maur village in Monghyr district, Dr. Sri Krishna Sinha, was educated in Monghyr Zila School and the Patna College and Patna Law College. After taking his M.A. and Law degrees, he rose to eminence first as a lawyer. He practised as a lawyer at Monghyr from 1916 to 1920.

In his early life, he was inspired by Khudiram Bose and Sri Aurobindo. When Mahatma Gandhi's call for non-cooperation came, he gave up his practice and joined the freedom struggle. He raised his voice against the atrocities of the "white" planners of Kharagpur (Monghyr district), even before joining the non-cooperation movement which was started under the leadership of Mahatma Gandhi in 1920. In the 1920-21 non-cooperation movement he plunged headlong into the country's fight for freedom.

Apart from the financial loss that he incurred by giving up his lucrative practice at the bar in response to Mahatma Gandhi's call, he suffered incarceration for about ten years between 1920-1945 in 1922, 1930-31, 1932-33, 1940-41 and 1942-45.

Dr. Sinha quickly gained recognition in his political career: In 1927 he was elected leader of the Swaraj Party in the Bihar Legislature. By 1935 he had risen to be President of the Bihar Provincial Congress Committee.

For a brief year he served as member in the Central Legislative Assembly and resigned his seat to lead the first Congress Ministry in Bihar in 1937. He returned to the Central body nine years later as member of the Constituent Assembly.

His many endearing qualities, including his keen sense of humour which enabled him to laugh even at his own cost installed him as a leader of men for over 37 years of his public life since he became the Leader of the Opposition in the Bihar Legislative Council in 1927. He became the first Chief Minister of Bihar in 1937 and has been holding that office since then except during the Section 93 regime. (When popular Government was restored in the States in 1946 Dr. Sinha resumed leadership of the Ministry in Bihar).

A great scholar and an ardent lover of books, Dr. Sinha was honoured by the Patna University over a decade ago when it conferred upon him the degree of Doctor of Laws "honoris causa". He donated several thousand books, his entire life's collection to the Sri Krishna Sey Sada Library of Monghyr some time ago.

JOHN LUMLEY DUNDAS

Lawrence John Lumley Dundas, Second Marquess of Zetland, one of Britain's greatest authorities on India and a former Secretary of State for India and Burma died at his family home in Richmond on February 7, aged 84.

Lawrence John Lumley Dundas, KG PC, GCSI, GCIE, second Marquess of Zetland, was born in 1876 and educated at Harrow and Trinity College, Cambridge. He was a great traveller and visited Ceylon (1893); India (1899-1900); Persia (1900-01); Asiatic Turkey, Persia, Central Asia and Siberia (1903); and Japan, China and Burma (1906-07). In 1900 he was ADC to the Viceroy.

As Lord Ronaldshay he was a member of the Royal Commission on the Public Services in India (1912-14) and Governor of Bengal (1917-22). Later, as the Marquess of Zetland, he was Secretary of State for India (1935-40) and Secretary of State for Burma (1937-40). He bore the Sword of State at the Coronation of King George VI.

A man of deep culture and wide interests, he was President of the Royal Geogra

phical Society from 1922 to 1925, and a Trustee of the Society until 1947. He was also President of the Royal India Society for 27 years from 1923 the Royal Asiatic Society (1928-31) and the Society for the Study of Languages (1931), and a Vice-President of the Royal Central Asian Society.

The Marquis of Zetland was selected by the British Government to participate in the second Round Table Conference in 1930-31. He was also a member of the Parliamentary Joint Select Committee on India in 1933. The Universities of Cambridge and Glasgow conferred on him the LL.D (Hon.), and the University of Leeds the D.Litt.

His tenure as Governor of Bengal which coincided with a particularly troubled period in the province's history, was also generally accounted enlightened. He was responsible for the expansion of local self-government in the districts and for fighting malaria and starting the province's health activities on a sound footing.

As head of the province both when the reforms scheme was being elaborated and when the new system of government was inaugurated, he played an important part in a large constitutional field. His sympathetic attitude contributed largely to the final acceptance of dyarchy.

Encouraged by the success of the drainage scheme he had initiated in a Bengal district, by which an area of waterlogged soil was converted into a fertile land, he convened a conference of Governmental District Boards and local authorities on this highly profitable form of land reclamation. This was the responsibility of local authorities, but he took the lead in the matter.

During the non-cooperation movement of 1921 lathi-charges had been meted out to women demonstrators. A few days later at the annual police parade he highly praised the police for their efficiency. Public resentment, already connected the two events, interpreted his speech as a slur on Indian women and rose to fever pitch. Those who knew him personally were certain that he was incapable of making any such remark. He himself was unhappy over the situation and wanted to make amends. But officialdom shuddered at the thought of an apology

by a Governor. Some persons requested Rabindranath Tagore to see him and discuss the matter with him.

After the talk Tagore issued a statement saying that the Governor had not intended to cast a slur on Indian women. The Governor issued a separate statement in which he said that such a thought had never occurred to him, but he deeply regretted any humiliation the demonstrators had felt. His popularity, then at a low ebb, sky-rocketed after the statement was published.

Tagore's interview with him resulted in a lasting friendship between the two. Each had read in the other a kindred spirit. A few months later the poet invited him to Santiniketan. About a mile from the Ashram the Governor got down from his car. It had been the practice in ancient India, he said, for a king to alight from his chariot and enter a sage's ashram on foot. Since he was a representative of the king he would do so too. He finished the rest of the journey on foot.

A prolific writer, his publications include *Snoot and Politics Under an Eastern Sky*, *On the Outskirts of Empire in Asia*, *A Wandering Student in the Far East*, *An Eastern Miscellany*, *Lands of the Thunderbolt*, *Sikkim, Chumbi and Bhutan, India—A Bird's-eye View*, *The Heart of Aryavarta* (awarded the Gold Medal of the Royal Empire Society; this book caused some controversy in India), *The Life of Lord Curzon* (authorized biography of Marquis Curzon of Kedleston), *The Life of Lord Cromer* (authorized biography of Evelyn Baring, first Earl of Cromer), and *Steps Towards Indian Home Rule*. He also edited the letters of Disraeli to Lady Bradford and Lady Chatterfield.

* * *

SANT FATEH SINGH

Sant Fateh Singh, the veteran Sikh leader, was recently in New Delhi to present his case on Punjab Suba to the Prime Minister Mr. Nehru.

Sant Fateh Singh was born to Muslim parents but long the eldest son was offered to Sikhism in keeping with a family tradition.

One of his forefathers, Rai Kalla, a warrior (warrior), was an ardent devotee of Guru Gobind Singh, the 10th and last Guru of the Sikhs and he offered his eldest son to the Guru to be converted to Sikhism. Since

then this has become a practice in the family.

Sant Fateh Singh is a descendent of Rai Kalla. He was born on October 27, 1911, at Badiala village, 10 miles from Phool Mandi, in Barnala district of the erstwhile Patiala State. When he was five, he was offered to Sant Channan Singh, a famous Sikh saint of Bikaner, who was head of Baba Budha Singh's gaddi.

The young disciple was converted to Sikhism and named Fateh Singh after a son of Guru Gobind Singh who had been martyred during the life-time of the Guru.

Young Fateh Singh started learning Gurmukhi and reciting Japji prayers. He has no idea of his father's name and even today his parentage is hardly known even to his followers.

He devoted himself to the service of his 'guru'. He used to clean utensil and did his work so well that one of the Sikh divines once remarked that he would be able to clean his mind too through devotion to the Almighty.

After the death of Sant Channan Singh, Sant Fateh Singh succeeded to the 'gaddi' by his exceptional service to Sikh gurdwaras.

He repaired many gurdwaras with his own hands. With his headquarters in Ganganagar, where a number of Sikh colonisers settled soon after the opening of the Ganganagar Canal. Sant Fateh Singh started a network of schools and gurdwaras in the villages. Today Ganganagar and the surrounding areas have 27 higher secondary schools, 53 middle schools, one degree college and 97 gurdwaras—all built through charity. A number of roads and culverts were also built by the people through his inspiration.

Sant Fateh Singh became dictator of the Akali agitation for Punjabi Suba when Master Tara Singh was arrested. He undertook a fast-unto-death on December 18, 1960 to urge the Union Government to agree in principle to the formation of a Punjabi-speaking State.

He, however, broke his fast after eighteen days on the assurance given by Mr. Nehru that the political rights of Sikhs are safe in India.

* * *

MR. A. L. P. NORRINGTON

Mr. A. L. P. Norrington, Vice-Chancel-

lor of the University of Oxford and Chairman of the United Kingdom Government's Advisory Committee on the Selection of Low-priced Books for Overseas, visited Delhi between January 15 and 21, 1961 for talks with the Indian authorities on the scheme for low-priced university textbooks. While in Delhi, he was the guest of the India International Centre. During his stay in India, he met the Vice-President, Dr. S. Radhakrishnan; the Minister of Education, Mr. K. L. Shrimali and the Minister of Scientific Research and Cultural Affairs, Mr. H. Kabir. He had also discussions with the University Grants Commission; the Vice-Chancellor of Delhi University; and the Member for Education in the Planning Commission.

In September 1960, Mr. Norrington, the President of Trinity College, Oxford, was nominated Vice-Chancellor of the University of Oxford for the coming two-year term by Mr. Harold Macmillan—the first of such nominations made by Mr. Macmillan in his capacity as Chancellor of the university. The Vice-Chancellor's term of office was recently reduced from three to two years in view of the arduous nature of the duties involved for an already busy head of college.

Mr. Norrington is also a Justice of the Peace in the City of Oxford, and in September 1959 was appointed chairman of the United Kingdom Government's Advisory Committee on the Selection of Low-priced Books for Overseas. Mr. Norrington is an expert on book publication; before receiving his appointment to Trinity he was for many years associated with the Oxford University Press.

Arthur Lionel Pugh Norrington was born on October 27, 1899, and was educated at Winchester and at Trinity College, Oxford, where he was a scholar. He served during the latter part of World War I with the Royal Field Artillery. In 1923 he joined the Oxford University Press, and during his early days with the press he worked for a time in India. He was concerned with the publication of the Oxford Pamphlets on World Affairs, which were launched in 1939 and of which some 6,000,000 copies were sold during the years of the second World War. A number of them were translated into many languages.

From 1948 to 1954, Mr. Norrington was Secretary to the Delegates to the Oxford

University Press, in the latter year he was elected President of his old college

He is part-editor of an edition of the poems of A. V. C. Clough published in 1951. He married Edith Joyce Carver in 1928, they have two sons and two daughters

FATHER PIRE

Father Dominique Georges Pire, who won the Nobel Peace Prize in 1938, arrived in New Delhi on January 12 on his way back to Belgium from Tokyo. During his one-week stay in India, he met the President, the Vice-President, the Prime Minister and the Minister for Scientific Research and Cultural Affairs. He also visited Ahmedabad, the Sabaramati Ashram and other places associated with Mahatma Gandhi.

"I have great admiration for Mahatma Gandhi's work," he said in New Delhi. On his 49th birthday last year, Father Pire laid the foundation-stone of the Mahatma Gandhi International Youth Centre at Tihange-lez-Ilvre in Belgium. The centre is a meeting place for the youth of all countries to train them to work for peace among their own people.

Born on April 10, 1910, Father Pire entered the Dominican order in 1928. In 1932 he went to Rome where he took his doctorate in the law in 1934. Later he spent a year at Louvain University studying Social and Political Science and 10 years at La Sarte teaching Moral Philosophy and Sociology.

In 1938 he founded his first two charitable institutions "Free Help To Needy Families" and "Holiday Resort For Poor Children."

During the war, he was chaplain to the resistance movement. In 1949 he started his campaign to help rehabilitate displaced persons from Eastern Europe and opened four homes for aged refugees and six villages—one in Belgium, one in Austria and four in Germany.

For his work among the refugees he was awarded the Nobel Prize. A Belgian journalist then wrote to Father Pire "From now on, you are part of every man's dream of peace."

Father Pire is also the originator of the movement of "World of the Heart."

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AGITATION FOR PUNJABI SUBA ENDS

The Governor of the Punjab, Mr N. V Gadgil, promulgated on July 19, 1960, an ordinance intended to end the use of **gurdwaras** (Sikh shrines) for political purposes by the promoters of the Akali Dal's agitation in favour of a unilingual Punjabi-speaking State (Punjabi Suba)

The ordinance provided inter alia that protecting proclaimed offenders and assisting them to avoid arrest would be punishable by imprisonment for up to three years or a fine, or both. The Chief Minister of the Punjab, Sardar Pratap Singh Kairon stated that 70 wanted men were being harboured in the Golden Temple at Amritsar and other shrines in the State, out of respect for the religious feelings of the Sikhs, however the police had made no attempt to enter shrines in pursuit of them.

During a debate in the State Assembly on Nov 21 Sardar Kairon offered to withdraw the ordinance, which had been widely criticized, if the use of gurdwaras for political purposes was ended. He also stated that a total of 21,038 **Akalis** had been arrested since the agitation began, of whom 2,313 were still in prison.

The agitation led to a number of outbreaks of violence during the autumn. On Oct 11 demonstrators armed with **kirpans** (carried by all Sikhs as a religious obligation) and spears clashed with the police outside a shrine at Patiala, a demonstrator being killed when the police opened fire and several people injured on both sides. Another serious incident occurred on Nov 24, when 1,000 police cordoned a shrine in Delhi inside which thousands of Sikhs had assembled in preparation for a march to the Parliament building. The Sikhs threw stones over the walls at the police, who replied by firing tear-gas shells into the grounds of the shrine. According to police sources 86 policemen including senior officers, and about 25 other people were injured.

In Bhatinda prison, where about 1,300 **Akalis** were detained, the prisoners rioted on Oct. 9 and order was not restored until

the police had opened fire. Four prisoners were shot dead, and 27 prisoners and 28 police and prison staff injured in the rioting. Police used tear-gas on Dec 4 to suppress another serious riot in Tihar Prison, 15 miles from Delhi.

Sant Fateh Singh, who had led the agitation since the arrest of Master Tara Singh (President of the Akali Dal) in May, began a 'fast unto death' in the Golden Temple on Dec 18, swearing that he would not break it until Punjabi Suba was granted in principle. The Indian Prime Minister, Mr Nehru offered on Jan 4, 1961, to meet him for talks as soon as he was well enough to go to Delhi, and as a further conciliatory gesture Master Tara Singh was released on the same day. On the decision of the Working Committee of the Akali Dal, Master Tara Singh left on Jan 6 for Delhi and thence flew to Bhavanagar, where he met Mr Nehru on Jan 7. Pandit Pant (the Home Minister) was also present at the discussions. On the following day Mr Nehru issued a statement in which he said that 'the Punjab itself is broadly speaking a Punjabi Suba, as Punjabi is the dominant language there'. He also gave an assurance that there would be no discrimination against Sikhs, but added that any further division of the State would be harmful to everyone—the Punjab the Sikhs, the Hindus, and the nation itself.

In view of Mr Nehru's statement, Master Tara Singh assured Sant Fateh Singh that the conditions of his oath had been fulfilled and Sant Fateh Singh (whose condition had already caused grave concern) accordingly ended his fast on Jan 9. The Government of the Punjab announced later the same day that a general amnesty had been granted to all Akali prisoners—about 5,000—arrested in connexion with the Punjabi Suba agitation except those who were involved in acts of violence, and that all restrictions on public meetings and processions, as well as on the Press, had been ended.

Announcing this decision Sardar Kairon said that 'the Government was anxious that normal conditions should be

restored as soon as possible and an atmosphere created to forget the bitterness of the past. He added that the Government would continue to maintain law and order throughout the State, trusted that it would not be challenged in this duty, and would try to promote better relations between the communities. Asked about the Punjabi language, the Chief Minister said: "The Government has been doing everything to promote the cause of Punjabi and will continue to do everything in its power in this direction."

Master Tara Singh announced in New Delhi on Jan. 9 that there was no question of withdrawing the demand for a Punjabi Suba, but that the "struggle" for its creation would now be continued "peacefully and constitutionally."

* * *

INDIAN NATIONAL CONGRESS SESSION

The 66th session of the Indian National Congress was held in Bhavnagar on January 6 and 7, 1961. The President of the Congress, Mr. N. Sanjiva Reddy, was in the Chair.

On January 4 and 5, the A-ICC met in the Subjects Committee to discuss the various resolutions which would be placed before the Congress session.

On January 5, the A-ICC elected Mr. Atulya Ghosh (West Bengal) to the Central Parliamentary Committee. Mr. A. S. Raju (Andhra) had earlier withdrawn from the contest. Four other members of the Committee were elected at the Raipur session of the A-ICC in October, 1960—Mr. Lal Bahadur Shastri, Mr. Y. B. Chavan, Mr. S. K. Patil and Mr. S. Nijalingappa.

On January 6, Mr. Sanjiva Reddy opened the 66th Session of the Congress with his presidential address.

In his address, he suggested that people in power for 10 years should retire and take over organizational work. This would not only ensure equitable distribution of talent between the Government and the organization, but also check the growing tendency among Congressmen to seek power through "machinations and intrigue for selfish ends".

He made two other suggestions—one to stem the fissiparous tendencies of linguism, casteism and provincialism in the country and the other to check the growing excesses of elections.

With regard to the fissiparous tenden-

cies, he felt that the Zonal Councils, which were merely advisory bodies at present could be more effective if they were given statutory and administrative powers.

Regarding the cost of elections, he said it might be desirable to consider a system of indirect elections for the future. He explained that each village could elect a representative to form an electoral college to elect representatives to Parliament and State Legislatures.

He touched on practically every aspect of India's internal and foreign policy and re-affirmed the Congress Party's faith in democratic planning for internal development and Panch Shila as the basis for external relations.

The Congress session passed a number of resolutions on January 6 and 7, which were earlier adopted by the Subjects Committee. They related to the Manifesto for the 1962 General Elections, Sino-Indian Border Dispute, International Situation, National Integration, Third Five-Year Plan and Panchayat Raj.

On January 6, the A-ICC elected seven members to the Congress Working Committee as per the resolution of the Raipur Session of A-ICC in October, 1960 to elect one-third of the total strength of the Working Committee (21).

They were: Mrs. Indira Gandhi, Mr. Y. B. Chavan, Mr. Sadiq Ali, Mr. G. Rajagopalan, Mr. Darbara Singh, Mr. Ram Subhag Singh and Mr. H. K. Mahtab.

On January 11, the Congress President, Mr. N. Sanjiva Reddy, nominated the following (out of the two-thirds) to the Working committee: Pandit G. B. Pant, Mr. Morarji Desai, Mr. U. N. Dhebar, Mr. K. Kamraj, Mr. S. N. Nijalingappa, Mr. Jagjivan Ram, Mr. M. L. Sukhadia, Mr. S. K. Patil, Miss Abha Maiti and Hafiz Mohammed Ibrahim. Three other members were proposed to be named later.

Mr. Sadiq Ali, Mr. G. Rajagopalan and Miss Abha Maiti were re-named as General Secretaries.

The Congress General Secretaries, in their report to the session, expressed serious concern at the "lack of unity among congressmen in some States" and warned congressmen against the "unhappy development" of formation of "rigid groups" round personalities with the aim of capturing power by "group pressure."

Congress Convention on Algeria: India's sympathy and solidarity with the Algerian people in their struggle for freedom was expressed at a Special Convention of the delegates to the 66th session of the Indian National Congress held in Bhavanagar on January 6, 1961.

The Congress President, Mr. N. Sanjiva Reddy, Mrs. Indira Gandhi and Mr. U. N. Dhebar, Chairman of the National Algeria Committee, addressed the convention.

The Algerian "Provisional Government's" representative in India, Cherif Guellal, told the delegates that India's recognition of his Government would be an "effective support" to their cause. He added that the decision of the Soviet Union and Yugoslavia to recognise the "Provisional Government" had greatly strengthened the freedom movement in Algeria.

Mr. Sanjiva Reddy said it was unfortunate that France, which had once lighted the torch of liberty, should put forward excuses for not conceding the birth-right of the Algerians.

* * *

JAN SANGH ANNUAL CONFERENCE

The ninth annual conference of the Bharatiya Jan Sangh was held in Lucknow from December 30, 1960 to January 1, 1961.

At the Conference, the Berubari issue was given top priority. The Party requested the President not to give his assent to the Constitution (Amendment) Bill seeking to transfer the territory to Pakistan.

Three resolutions on the internal situation, economic policy and the Third Five-Year Plan adopted earlier by the Central Executive were released on December 30.

The first resolution emphasized the danger of political disintegration of the country. It found evidence for this in the Government's acceptance of the demand for a Naga State, in the Akali agitation; the influence of Christian missionaries and what it described as the re-emergence of Muslim communalism. It blamed the Congress for encouraging these forces and feared that the communists were "reaping a rich harvest out of this situation."

The resolution on the Third Plan strongly criticized its magnitude and regretted that the outlay had been raised considerably even though there had been short-falls in the Second Plan. It feared that the Government would have no alternative but to resort to heavy deficit financ-

ing, leading to inflation and a further rise in costs.

The resolution was critical of the policy of importing foreign capital without raising matching internal resources. It doubted the efficacy of physical controls and was confident that the private sector could play a greater part in implementing development plans.

It also regretted that more attention had not been paid to defence requirements in view of growing threats to the country's security.

The resolution on economic policy pleaded for a de-centralized economy. It suggested that large-scale production might be necessary only in certain basic defence and producer goods industries.

In agriculture, the resolution favoured a land-ceiling as well as minimum economic holdings and family farming as opposed to large-scale farming whether by individuals, cooperatives, or the Government.

The Conference adopted a resolution on the internal situation with an amendment urging the Government to appoint a Commission "to look into the activities of fifth columnists engaged in undermining the roots of Indian nationalism."

The General Secretary of the Party, Mr. Dindayal Upadhyaya, told a news conference in Lucknow on January 2 that his Party would contest over 1,000 State Assembly seats and nearly 200 Parliamentary seats in the next General Election.

The new working committee of the Party was announced on January 2. The following were the members of the Working Committee:

Mr. A. Rama Rao—President; Mr. D. P. Ghosh and Mr. Pitamber Dass—Vice-Presidents; Mr. Keshav Chandra—Treasurer; Mr. Dindayal Upadhyaya—General Secretary; Mr. Jaggannath Rao, Mr. Atal Behari Vajpayee and Mr. Sunder Singh Bhandari—Secretaries; Mr. Balraj Madhok—Secretary, North Zone; Mr. Nanaji Deshmukh—Secretary, East Zone; Mr. Uttamrao Patil, Mr. Premnath Dogra, Mr. Narendra Singh, Mr. Krishnalal, Mr. Yagya Dutt Sharma, Mr. Gurudatt Vaidya, Mr. Maravir, Mr. J. P. Mathur, Mr. Rajkumar, Mr. Thakur Prasad, Mr. Haripad Bharati, Mr. M. A. V. Rao, Mr. V. Rajagopalachari, Mr. N. Menon, Mr. B. R. Vyas, Mr. Giriraj Kishore Kapoor, Mr. Hari Pandya, Mr. U. M. Trivedi, Mr. Bahiron Singh Shekhawat and Mrs. Kamla Madhok.

FOREIGN EVENTS

ROYAL COUP IN NEPAL

King Mahendra of Nepal dismissed Mr. B. P. Koirala's Ministry on Dec. 15, 1960, arrested most of its members and many other political leaders, dissolved Parliament, and suspended sections of the Constitution. He himself formed a Government on Dec. 26, and in a proclamation issued on Jan. 5, 1961, dissolved all political parties and announced the introduction of a system of "basic democracy."

The Constitution had come into force on June 30, 1959, and the country's first elected Parliament had been opened by the King on July 24, 1959. In the Speech from the Throne he had announced that a ceiling would be imposed on land-holdings, and that the system of rent-free landed estates and the judicial, police, and other powers exercised by local chieftains would be abolished. The Government's first budget, introduced on Aug. 9, 1959, had for the first time imposed taxes on the large rent-free and tax-free estates which had been introduced by the Rana regime in order to create a privileged landed aristocracy.

There had been considerable unrest in Nepal in recent months, leading to disturbances in western Nepal. On Oct. 8, 1960, it was announced that Prince Om Jung, the son of the Raja of Bhajang, had defied the Government's authority for several weeks and with his followers had attempted to resist by force the establishment of a Government court in the area. After a clash with the police the Prince had fled to India. During the second half of October an unsuccessful attempt at overthrowing the Government was made at the town of Gurkha under the leadership of a Hindu yogi over 50 people being arrested.

The royal coup began during the morning of Dec. 15, when royal guards entered a youth conference at which the Prime Minister and members of his Cabinet were present and arrested Mr. Koirala, Mr. S. P. Uppadhyaya (Minister of Home Affairs), Mr. Ganeshman Singh (Communications Minister), and Mr. K. P. Bhatrai (Speaker of the Lower House). They, as well as other Ministers, were taken to the Govern-

ment Secretariat, which was strongly guarded, and troops were posted outside the royal palace and at other vantage points in Kathmandu. Conditions in the city otherwise remained normal, except that telephone communications were disrupted and a curfew was enforced in the neighbourhood of the palace. At 3-15 p.m. the King broadcast a proclamation announcing that he had dissolved the Cabinet and both Houses of Parliament, declared a state of emergency, suspected sections of the Constitution including those guaranteeing fundamental rights and assumed all powers of administration "until such time as alternative arrangements are made."

Explaining his reasons for this step, the King declared that "Hopes that the first elected Government would be able to give the country stability and march on the path of progress have been dashed." Despite his warnings from time to time, the Administration had been paralysed. He continued: "As a direct result of misuse of authority, multiplying corruption, creating misunderstandings, and weakening the administrative machinery, the Cabinet has proved itself totally incapable of maintaining law and order. . . This governmental irresponsibility has encouraged anti-national elements, and brought into being an atmosphere detrimental to the vital interests of national unity. . . The economic steps taken by the Cabinet, without a scientific analysis and a proper study of actualities, and founded on crude theories only instead of bringing about worthwhile changes in society, have merely created an atmosphere of instability and insecurity. Lawlessness and disorder in the country have also increased. Such a situation cannot be allowed to continue in the guise of democracy, and I am taking these steps because it is my ultimate responsibility to maintain order and the integrity and sovereignty of the country." He concluded his proclamation by giving an assurance that Nepal would continue to adhere to a policy of neutrality and maintain friendship with all nations.

In a statement issued in Delhi, the Nepalese Ambassador to India, Lieut.-General S. J. B. Rana, said that the King had taken action in response to an insistent popular demand. The Government, he alleged, had "annoyed" the people because contrary to the Constitution, it was taking over land without compensation; there were charges of corruption; and the Communists were "getting the upper hand."

All forms of political activity were banned on Dec. 16, and within the next three days a large number of prominent politicians were arrested, including both members of the Nepali Congress and leaders of all the Opposition parties. An official statement issued on Dec. 19 gave the number of arrests as 42, excluding Ministers, the Leader of the Opposition, and the Speaker of the Lower House; all the leaders of the Communist Party, however, were reported to have gone underground. Many of those arrested were, however, released after a few days, including two former Premiers, Dr. K. I. Singh and Mr. Tanka Prasad Acharya, and two Deputy Ministers in Mr. Koirala's Government, Mr. Surva Nath Dass Yadav and Mrs. Dwarika Thakurani.

Three members of the Government who were out of the country escaped arrest—General Subarna Shamsher (Deputy Premier), who was in India, Mr. Kashinath Gautam (Health Minister), who was visiting the United States, and Mr. P. N. Chaudhury (Education Minister), who was attending a Unesco conference in Paris.

The Indian Prime Minister, Mr. Nehru, said in reply to questions in the Lok Sabha on Dec. 16 that although it was not for him to criticize the actions that had been taken in Nepal, it is "obviously a matter of regret for all of us that the democratic experiment or practice that was going on there should have suffered a setback." The Indian Government, he added, had had no previous intimation of the King's action, although it had received numerous reports for several months that the King was dissatisfied with the functioning of his Cabinet and that he might take some action.

In a statement in the Rajya Sabha on Dec. 20, Mr. Nehru spoke in critical terms of King Mahendra's action, which, he said, had come as "a shock" to him. The King, had previously given the impression in private talks that he was getting on very well

with the Ministry. Describing the King's charges as "vague," Mr. Nehru pointed out that the Koirala Ministry had been functioning under difficult conditions; nobody could describe it as "ideal", but since its installation Nepal had for the first time had "some ordered government trying to do its best." He did not understand the King's reference to "crude theories"; if this meant the ministry's land reforms, these had been "very moderate." What had happened, Mr. Nehru added, was "not just a dismissal of a Ministry but a complete reversal of the process of establishing democracy." There could, however, be no going back on democracy in Nepal. India had helped Nepal in the past and was still helping her in many ways, and so "India's interests in Nepal are inevitable."

King Mahendra defended his action in a press statement issued on Dec. 23, in which he declared that he did not wish to do away with the democratic system or to "deprive the people of their well-earned rights," and that before long he would "initiate the necessary preliminary steps calculated to advance true democracy." His recent action, which had been "welcomed all over the country with heartfelt rejoicing," showed his "desire to check the mischiefs perpetrated in the name of democracy," and his future efforts would be inspired by "the same unshakable aim of securely laying the foundations of democracy."

On Dec. 26 the King formed a Council of Ministers under his chairmanship. The new Ministers were Dr. Tulsi Giri, Mr. Biswa Bandhu Thapa, Mr. Rishikesh Shah, Mr. Surya Bahadur Thapa, and Mr. Anirudha Prasad Singh. There were also four Assistant Ministers—Mr. Negeshwar Prasad Singh, Mr. Khagendra Jung Gurung, Mr. Kaziman Limbu, and Mr. Bhubanlal Pradhan.

Dr. Giri, who was given the new portfolio of Palace Affairs, was formerly Deputy Foreign Minister and subsequently Village Development Minister in Mr. Koirala's Cabinet, but resigned in October 1960 because of differences with the Prime Minister. He was arrested after the coup but released on Dec. 20. Mr. B. B. Thapa, the Government Chief Whip in the dissolved Parliament, was also arrested on Dec. 21 on his return from New York, where he had been a member of the Nepalese delegation to the U.N., but was released on the

following day. Mr. Rishikesh Shah, the Nepalese Ambassador in Washington and permanent delegate to the U.N., was summoned home to become Minister of Economic Affairs, Planning, and Finance.

All political parties were banned by a Royal proclamation issued on Jan. 5, 1961. The proclamation stated that the attempt to build democracy from the top through political parties had failed, and that instead it would be built up gradually from the bottom, on the basis of **panchayats** (village councils). (It was suggested in the foreign Press that the proposed system of "basic democracy" was modelled on that introduced in Pakistan by President Ayub Khan.) In his proclamation the King enlarged on his charges against Mr. Koirala's Government, which he accused of corruption, maladministration, and failure to maintain order. He criticized its attempts to impose a new taxation system "without due regard to existing conditions," and alleged that its plans for reforms had created "economic uncertainty"; in consequence landlords had stopped credits to cultivators and tenant farmers had been evicted.

* * *

MILITARY REVOLT IN ADDIS ABABA

A section of the Ethiopian Imperial Guard and the police carried out a **coup d'état** in Addis Ababa on Dec. 14, 1960 in the absence of the Emperor Haile Selassie, who was on a State visit to Brazil. The rebels were not supported by the rest of the armed forces or by the civilian population, however, and the revolt had been crushed by Dec. 17, when the Emperor returned to his capital.

The Emperor had left Addis Ababa on Nov. 30 for a tour of West African States, during which he visited Ghana, Liberia, and Togo. He afterwards flew to Brazil, visited the new capital of Brasilia, and was in Sao Paulo when he learned of the revolt.

The Imperial Guard is an elite force of some 8,000 men, including armoured units; at the time of the revolt about 2,500 of its members were serving with the U.N. Force in the Congo. The most prominent leaders of the revolt were General Mengistu Newaye, Commander of the Imperial Guard, and his brother Germame Newaye, governor of Jijiga province. Among their leading supporters were General Mulugeta Bulli, a former commander of the Imperial Guard and personal Chief of Staff to the

Emperor, Brigadier Sige Dibu, Chief of Police, Colonel Workineh Gebeheyu, Chief of Security, and Getachew Bekele, Assistant Minister of Marine. Several of the rebel leaders were among the Emperor's most trusted advisers, and had received many marks of his personal favour in the past.

The rebels began their **coup** at 3 a.m. on Dec. 14, when they placed members of the Imperial family and the Government under arrest. The Crown Prince Asfa Wasan was summoned by a telephone call alleging that his mother, the Empress Menen, was dangerously ill, and was seized on arriving at her palace. Units of the Imperial Guard meanwhile occupied the radio station, the airfield, the ministries, and other key points; telephone and cable communications were cut; and soldiers were posted outside the British, U.S., and Soviet embassies. An officer visited the university and appealed to the students to demonstrate in support of the revolution.

Early on Dec. 14 the British Ambassador (Mr. Denis Wright) had been informed of the **coup** by the Vice-President of the Senate Dejazmatch Asrate Kassa, who had escaped arrest by the rebels, and was asked to convey the news to the Emperor; within a few hours the British Ambassador in Rio flew to Sao Paulo to inform the Emperor.

Meanwhile the foreign embassies in Addis Ababa were informed of the **coup** during the morning in a Note signed under duress by the acting Foreign Minister, Mr. Dawit, and were asked to recognize the new Government. About noon the Crown Prince, also acting under duress, broadcast a proclamation announcing that a new Government had been formed, including "his Imperial Highness the Crown Prince, the armed forces, and young educated Ethiopians," and that it would end "3,000 years of injustice."

The proclamation said: "The laws and regulations of the country have been abused to deprive the common people of their rights and privileges in order to boost the riches of the favoured few. The people of Ethiopia have waited for a long time with patience in the hope that they will be free some day of oppression, poverty and ignorance. In doing this they have amply demonstrated their abundant patience. But empty promises can no longer

satisfy the people, who now want concrete action aimed at improving the standard of their living. Development plans have not been executed in practice, and the long strides being made by the newly independent African States, which are making progress day by day, have made the people of Ethiopia realize that these new nations are advancing pretty fast, leaving the people of Ethiopia behind; and this has shattered the hopes of the Ethiopian people. I have decided to serve my country and my people sincerely, in accordance with the Constitution and at a salary as decided, like any other Ethiopian."

A broadcast statement by the new Government announced the indefinite suspension of Parliament and the incorporation of the Imperial Guard into the Army; it also promised that constitutional and agricultural reforms would be carried out, and guaranteed foreign capital and interests. It was announced on Dec. 15 that Ras Imru (a cousin of the Emperor and former C-in-C.) would be Prime Minister in the new Government, and that General Mulugeta Bulli had been appointed Chief of Staff. It subsequently transpired, however, that Ras Imru had been arrested with the other members of the Imperial family, and that his name, like that of the Crown Prince, had been used without his consent.

Although students from the university demonstrated in support of the new Government on Dec. 14, some with banners proclaiming a "people's republic," the mass of the people remained passive. The regular Army and Air Force gave no support to the rebels, the police were divided, and it was reported that one battalion of the Imperial Guard had refused to join the revolt.

Opposition to the rebels among the civilian population was organized by General Merid Mengesha (Chief of Staff) and General Kebede Gabre (commander of the land forces). Wishing to avoid a battle, the rebel leaders opened negotiations with the Army commanders on December 14 through the U.S. military attaches. This gave the loyalist officers, who had only two battalions near Addis Ababa, the opportunity to call in reinforcements from the provinces, together with a number of tanks, and by noon on Dec. 15 their troops were deployed around the capital. General Mengesha then issued a proclamation

declaring that the Army, Air Force, and Navy remained loyal to the Emperor, and calling on the people to follow their example. A major part in rallying civilian opinion against the rebels was played by the Bishop of the Coptic Church, who announced that all who helped the rebels would be excommunicated.

The loyalists opened a combined land and air offensive against the rebels in the afternoon on Dec. 15; aircraft bombed and machine-gunned the rebel strongpoints, and heavy artillery was brought into action. Troops which tried to storm the Imperial Palace penetrated as far as the throne-room, but were beaten back. The U.S. Ambassador, Mr. Arthur Richards, then agreed to carry a message to the rebels demanding their unconditional surrender. While he was in the palace, rebel troops machine-gunned 20 members of the Government who were being held as hostages, killing 15 and seriously wounding three.

Mr. Richards, who was in the room at the time, escaped by jumping through an open window. Among those killed were Ras Abebe Aragai (Defence Minister), Mr. Makkonen Habtewold (Minister of Commerce), Mr. Blatta Dawit (acting Foreign Minister), and Mr. Abede Mikael (Vice-Minister of Information). Fighting continued throughout the rest of Dec. 15 and the following day. The radio station was recaptured on Dec. 16 and broadcast an announcement that the loyalist forces were fully in control of the situation, and that only isolated pockets of resistance remained.

On learning of the revolt the Emperor returned to Ethiopia by air via Monrovia and Khartoum, and on Dec. 16 landed at Asmara, the capital of Eritrea province, where he was enthusiastically welcomed by huge crowds, cheering, singing, and waving palm branches. He flew to Addis Ababa on the following day and was greeted at the airport by the Crown Prince. Cheering crowds lined the streets as the Emperor drove to the Jubilee Palace (usually reserved for State guests), the Imperial Palace having been damaged in the fighting. In a broadcast on Dec. 18 he emphasized that his "beloved son" the Crown Prince was completely innocent, and offered an amnesty to all the rebels if they surrendered.

Fighting continued for some days on the outskirts of the capital and in the sur-

rounding hills, all the main rebel leaders being killed or captured. General Mulugeta Bulli, Brigadier Sige Dibu, and Colonel Workneh all committed suicide; Getachew Bkele was captured after a gun battle on Dec. 21; General Mengistu Newaye was captured on Dec. 24 after being seriously wounded; and his brother Germame was shot dead on the same day. The bodies of Colonel Workneh and Germame Newaye were publicly hung on gibbets in Addis Ababa.

Casualties during the fighting were announced on Dec. 20 as follows: armed forces—29 killed, 43 wounded; Imperial Guard—174 killed, 300 wounded; civilians—121 killed, 442 wounded. Seven foreigners were known to have been killed, including a British subject from Aden.

At a press conference on Dec. 20 the Emperor said, "I cannot yet say if there were foreign elements behind the rebels, but it is not impossible, and certain indications of a foreign hand can be discerned in the rebels' communiques." He added that he had received messages of congratulation from the British, U.S., Soviet, and Yugoslav Governments. Members of a military mission from the United Arab Republic, which had arrived in Addis Ababa on Dec. 13, were detained in their hotel for eight days while inquiries took place, but were subsequently released with an apology.

The Emperor issued a full pardon to all privates and NCOs of the Imperial Guard on Jan. 12, 1961. It was announced that officers who had taken part in the revolt would be placed on trial, officers who had not would leave the armed forces with three months' pay, sergeants and corporals would be re-engaged as privates, but would be restored to their rank for good conduct; and privates in good health and within the age-limit would be re-engaged. The Emperor had previously stated that he would not dissolve the Imperial Guard, as he was certain that the men had been misled by their officers.

KING SAUD TAKES OVER GOVERNMENT

Mecca Radio announced on December 21, 1960 that King Ibn Saud had taken over the Government, following the resignation of the Prime Minister, Crown Prince Emir Feisal and his Cabinet.

The Radio broadcast a Royal decree

announcing that King Saud, who is the elder brother of Emir Feisal, had accepted Crown Prince Feisal's resignation. Another decree proclaimed that the King would assume the Prime Ministership.

King Saud had handed over to Crown Prince Feisal in March 1958, control of Saudi Arabia's foreign, internal and financial affairs. Some reports said that Crown Prince Feisal had assumed the real power in the kingdom to bring the country out of financial difficulties.

Early in 1960, King Saud was reported to have toured the country to whip up support among the tribes for a "full return to power."

The appointment of a new Cabinet was announced on the night of December 21. Three members were brothers of King Saud, who had personally assumed the functions of Prime Minister. The fourth was the king's son, Mohammed Ben Saud, who was appointed Minister of Defence and Aviation.

The important post of Finance Minister was given to the King's brother, Emir Talal Ibn Abdel Aziz. The six other members of the 10-man Cabinet were chosen from outside the Royal Family.

The new Finance Minister, Emir Aziz, told newsmen in Beirut on December 22 that Saudi Arabia would be run on modern lines in which the Executive would be controlled by an elected National Assembly.

It was announced on December 23 that Saudi Arabia would have a National Assembly, which would draft a Constitution for the country. This would be the first National Assembly in Saudi Arabia.

Two-thirds of the members of the Assembly would be elected and the remaining one-third would be nominated by King Saud. The elected members would consist of tribal chiefs and representatives of other interests.

The announcement added that Saudi Arabia's first Parliament would be given one year to complete the drafting of the constitution.

The new Cabinet was sworn-in on December 24.

A policy statement broadcast by Mecca Radio said that the new Government would direct its efforts to eliminating poverty, ignorance and disease. Methods of administration of the previous Government,

(Continued on page 292)



CRICKET

India-Pakistan Test Matches

Fourth Test: The fourth test match between India and Pakistan played on January 13, 14, 15, 17 and 18, went to its tame, inconclusive end, at Corporation Stadium, Madras. The scores were: India—539 (for 9 wickets declared); Pakistan—448 (for 8 wickets declared) and 59 (for no loss).

India was facing a follow-on, but Borde's 177 (unbeaten), his highest in a single innings in first-class cricket, averted the position completely and Indians surpassed the Pak total of 448 (for 8) of the first innings.

Among those who scored centuries are: Imtiaz Ahmed (135), Saeed Ahmed (103), P. R. Umrigar (117) and Chandu Borde (177)—all in the first innings.

Another remarkable thing about this match is that there was no dearth of records, the most notable being that **India amassed her highest total of 539 (for 9)**, surpassing 537 (for 3 declared) registered against New Zealand at the same venue five years ago.

Fifth Test: Pakistan hung on by the skin of their teeth to save the fifth test and the series against India at the Willingdon Pavilion (Ferozeshah Kotla Ground), Delhi on February 13. The scores of the match played on February 8, 9, 11, 12, 13 were: India—463 and 16 (for no loss); Pakistan—286 and 250. Mushtaq Mohammed (101), Hanif's brother, completed his first test century, fifth for Pakistan in the series; and Umrigar (112) his third century of the series.

Pakistanis were forced to follow-on after they had scored 286 runs in response to India's total of 463 runs in the first innings. In the second innings also Pakistan made only 250 runs and gained a lead of 73 runs only.

Pakistan was eight down for 196 at the tea interval and defeat seemed imminent, inevitable, when Mahmood Hussain came to their rescue, and, with the support of the tail-enders, helped them to score which

gave India no earthly chance to win. The end was tame, with Jaisimha and Kundram scoring 16 in the two overs before the close. Thus 'twenty minutes' robbed India of this victory.

One important happening that accounts for this only interesting match of the series is that after loosing all the four tosses, Contractor won the toss this time. But, perhaps, Contractor was not to captain the toss-winning side; he got injured off a ball from Mahmood Hussain on Feb. 9 (before lunch) and then Umrigar captained the team for the rest of the play.

Australia-West Indies Test Matches

Third Test: Spinners Lane Gibbs and Valentine routed Australia in the first session of play and bowled the West Indies to a 222-run victory in the third test, played on January 13, 14, 16, 17 and 18 at Sydney. The scores were: West Indies—339 and 326; Australia—202 and 241.

On January 17, Australians had collected 182 for the loss of two wickets in response to the West Indies total lead of 463; but the most unexpected happened the following day when eight Australian wickets, including those of O'Neill and Harvey, fell only for 59, thus bringing victory to the guest side.

Fourth Test: After being in a seemingly hopeless position, Australia held the West Indies to a draw in the fourth test, played on January 27, 28, 30, 31 and February 1, at Adelaide. The scores were: West Indies—393 and 432 (for 6 declared); Australia—366 and 273 (for nine).

Australia saved the fourth test with one of the greatest exhibitions of determination that any sport could possibly provide. In a tenth-wicket partnership, which lasted almost two hours, Ken Mackay and Lindsay Kline held out against the full force of the West Indies attack and played out time.

A remarkable achievement for the Caribbeans in this test was the hat-trick by the off-spinner Lance Gibbs - the first against Australia in Australia this century.

(Earlier, two Englishmen had the dis-

inction—W. Bates, at Melbourne, on the 1882-83, tour and J. Briggs, at Sydney, for W. G. Grace's side in 1891-92. There have now been 15 hat-tricks in Test cricket, the most recent before today being by the controversial Geoff Griffin, for South Africa against England, at Lord's last year, and fast bowler Wesley Hall, for the West Indies against Pakistan in 1959.)

Fifth Test: Australia routed West Indies by two wickets in the fifth and final test of the historic series, played on February 10, 11, 13, 14, and 15 at Melbourne. The scores were : Australia—356 and 258 (for 8 wickets); West Indies—292 and 321.

The history-making series thus reached the climax giving Australia one of the most exciting rubbers—the first test at Brisbane ending in a tie; second at Melbourne giving victory to Australia, third to West Indies at Sydney; fourth ending in a draw at Adelaide; and fifth again giving victory to the hosts at the same venue.

Since the summer of 1956 when the Aussies were demoralised by the spin-bowling of Jim Laker, the Australians have beaten South Africa, England, Pakistan, India and now the West Indies to earn the undisputed title of world champions. In that period they have won 13 tests, drawn seven, lost two and tied one.

Inter-University Cricket Championship

Bombay University regained the Rohinton Daria Trophy on January 27 when they defeated Allahabad by an innings and 87 runs on the fourth day of the five-day final of the Inter-University, Cricket Championship at Ahmedabad. Bombay had lost the trophy to Delhi last year.

The scores were: Allahabad—146 and 245; Bombay—478.

HOCKEY

Inter-University Hockey Tournament

Women: Punjab University beat Jabalpur by one goal to nil in the replayed final of the Inter-University Hockey Tournament for women at Aligarh on Jan. 17.

Men: Panjab won the All-India Inter-University Hockey Championship, beating Madras 2-0, in the final at Anamalainagar on February 2.

FOOTBALL

Durand Soccer Cup

For the first time since its inception in 1888, the Durand Soccer Cup will be in the joint custody of two teams. In the

replayed all-Calcutta final at the Delhi Gate Stadium, New Delhi, on January 19, Mohun Bagan, holders, and East Bengal were locked in a goalless draw and were thus declared joint winners of the coveted cup. Both teams had a number of Olympic players.

Mohun Bagan having won the toss earned the distinction of keeping the Cup for the first six months. President Rajendra Prasad distributed the prizes.

National Soccer Championship

Giving a superb defensive display, Services won the National Football Championship for the Santosh Trophy for the first time in their career at Calicut on February 9, beating Bengal, holder for the past two years, by a solitary goal in the replayed final.

TENNIS

Inter-University Tennis Championship

Calcutta won the Inter-University Tennis Championship at Hyderabad on January 27 beating Osmania in the finals by three matches to two. Jaideep Mukherjee (Calcutta) beat S. P. Misra (Osmania) 6-1, 6-1 and Inderjit Singh (Calcutta) beat S. S. Misra (Osmania) 6-4, 6-4.

BILLIARDS

National Billiards Championship

Wilson Jones, retained the National Billiards Championship when he overwhelmed Som Nath Banerjee, Calcutta, by 4365 points to 2739 in the final at Bombay on January 24.

National Snooker Championship

M. J. M. Lafir, of Ceylon, won the National Snooker Championship when he scored a meritorious victory over the holder, Wilson Jones, by six frames to three in the final at Bombay on January 25. The final scores were: 72-46, 89-38, 32-86, 58-44, 19-101, 42-59, 81-31, 62-39, 76-51.

BOXING

World light-weight title

Harold Johnson, U.S., became the new world light-heavy weight champion (NBA version) by beating his compatriot Jesse Bowdry by a knock-out in the ninth round at Miami Beach, Florida on February 7.

Johnson succeeds Archie Moore, who was deprived of his title.

SPORTS NEWS

Himalayan Mountaineering Institute

The development of the Himalayan Mountaineering Institute at Darjeeling for

furthering mountaineering as a sport in the country and the setting up of a central body for co-ordinating mountaineering activities have been recommended by a committee headed by Gen. Thimayya.

The report of the committee embodying these recommendations was endorsed by the All-India Council of Sports at its meeting in New Delhi on January 18.

The committee, which had been set up by the council, has suggested that equipment required for undertaking expeditions should be pooled at the Darjeeling institute, which should make such equipment available to those undertaking expeditions on easy terms.

Another recommendation was the setting up of an all-India skiing club with headquarters at Kufri, Himachal Pradesh. The committee has authorised its chairman to get into touch with experts in Italy and Switzerland to see if a suitable expert could be prevailed upon to come to India to organise skiing activities at Kufri.

The committee also suggested that during the third Plan period encouragement should be given to the starting of mountaineering clubs in about 15 universities. Such clubs should organise rock-climbing courses and training.

Committee for Sports Village

The All-India Council of Sports which met in New Delhi on January 18, appointed a four-member committee to go into the question of setting up a sports village in Delhi during the third Five-Year Plan and make suitable recommendations about the development of the land being acquired for the purpose.

The committee would consist of the Maharaja of Patiala, Gen. K. S. Thimayya, Mr. N. N. Wanchoo and Mr. P. N. Kripal.

Kaufmann Cleared

The Legal Committee of the Baden-Baden Athletic League withdrew its charges on January 21 against Carl Kaufmann, co-holder of the world record in the 400 metres, who had been accused of harming West Germany's prestige.

Ban on Hary Reduced

A 12-month ban on Armin Hary, West Germany's record-breaking sprinter and Olympic gold medalist, was slashed to four months on January 22.

The original ban was imposed earlier

this month by the Hesse Athletic Association on the grounds that he had presented false expense accounts and damaged the reputation of German athletics in a newspaper article.

India in Eastern Zone of Davis Cup

India's entry for the European Zone Davis Cup having been declined it will now play in the Eastern Zone, Mr. Shamsher Singh, secretary, All-India Lawn Tennis Association, told newsmen in New Delhi on January 24.

Explaining about some ill-conceived and unfounded comments in a section of the Press, Mr. Singh said that India had first entered for the Eastern Zone but since R. Krishnan had expressed his desire to play in the European Zone where he expected to get better competition before playing in the Wimbeldon, the AILTA had agreed to first enter for the European Zone. Nonetheless, the international body has turned down India's request and so "we are back to the Eastern Zone."

Morris Nichols Dead

Mr. Morris Nichols, former England and Essex cricket all-rounder, died in Nottinghamshire on January 27. He was 60. He played 14 tests for England between 1929 and 1939.

Women's Basketball Championship

The International Basketball Federation decided on January 29 that the next World Women's Basketball Championship would be held in Peru in 1963.

M.C.C. Tour for India and Pakistan

For the first time England is likely to send a full-scale cricket team to tour India and Pakistan next winter.

"The MCC are negotiating a new financial agreement with the two Asian countries," according to the Daily Mail.

A new Low

A perth suburban team created a record in Australian cricket at Perth on Feb. 4 when dismissed for only five runs—all of them byes.

The Bassendean 2nd XI were all out for five in answer to North Perth's first innings total of 120.

And following on, Bassendean were three runs for seven wickets at the close of play.

Indian Hockey Federation Meeting

The executive committee of the Indian Hockey Federation meeting at a special

session on Feb. 5 at Hyderabad endorsed the action of its President, Mr. Ashwini Kumar, in finalizing the composition of the Indian hockey contingent to the Rome Olympics last year.

The meeting was called to discuss among other things a report on India's defeat at the hands of Pakistan in the Olympic final.

Mr. Sait, Secretary, IHF, said that the executive adopted the report of Mr. B. L. Gupta, manager of the Indian team in principle. The report would be made public after the general council of the federation and the Indian Olympic Association had discussed it, he said.

A decision was also taken to invite Pakistan, Spain, West Germany, Kenya, New Zealand and England to participate in the international tournament.

Unique Olympic Hockey Tourney

The Olympic Hockey Tournament played out at the Rome Games is described as "unique" in the official report of the British Olympic Association.

The report said the tournament was "the most representative staged" and the Olympic title changed hands for the first time in over 30 years when Pakistan beat India 1-0 in the final.

"India, winners of six gold medals in succession, have dominated (Olympic) hockey since 1928 as few teams have ever dominated any game," the report said "At last they have been tipped off their pedestal, which is all for the good of the game in general and no bad thing for India in particular. One chest can wear too many medals."

The report said the classic final between India and Pakistan was a "superb exhibition of scientific hockey."

ILTC New President

Mr. J. C. Charanjiva was elected on Feb. 5 as president of the International Lawn Tennis Club for the current year.

Badminton Body Officials

The Badminton Association of India, at its meeting in New Delhi on February 12, elected the following office-bearers for the current year:

President: Rajkumari Amrit Kaur.

Vice-Presidents: Devraj Narang, L. N. Gupta and D. S. Mukherjee.

Hon'y. Secy.: Amrit Lal Dewan.

Foreign Events

(Continued from page 288)

against which there had been complaints, would, if need be, amended. The press would enjoy freedom within limits.

Referring to foreign policy, the statement said that the Government would co-operate with neighbourly Arab States on a basis of complete neutrality.

Referring to the dispute with Britain over the sovereignty of the Buraimi Oasis, it declared: "The Saudi Government is awaiting UN efforts to solve this dispute by peaceful means and we shall not hesitate to take all measures to regain this part of the Saudi Kingdom."

It added that the Government "will adhere to the Arab League Charter and will provide efforts to regain Arab rights in Palestine, Algeria, Oman and the South Arab Peninsula."

Mecca Radio announced on December 25 that a Royal decree had been issued approving a new Budget balanced at 1,786 million rials, including 180 million rials for defence and the air force and 34 million rials for foreign affairs.

According to a Mecca Radio broadcast on December 26, King Saud gave Saudi Arabia a provisional Constitution pending the drafting of a new Constitution by the proposed National Assembly.

The first Article of the provisional Constitution stated that Saudi Arabia was an Islamic sovereign Arab State within the great Arab nation, with an indivisible territory and a regime which was that of constitutional monarchy.

The second Article declared that Islam was the State religion of Saudi Arabia and that Islamic law was the fundamental source of the country's legislation.

Another Article said that the Arabic language was the country's official language.

The provisional Constitution also laid down that the successor to the Throne should be selected from the family of the late King Ibn Saud, father of the present King. A special constitutional provision would be issued to regulate this question in detail.

Appointments, Awards etc.

APPOINTMENTS

Dr. Ricardo Florencio Mosquera, Ambassador-designate of Argentina, presented his credentials to the President, **Dr. Rajendra Prasad**, on January 20.

With his left hand on a huge 15-lb. Bible, his right palm raised, **Mr. John F. Kennedy**, solemnly swore on January 20 to faithfully execute the office of President of the United States.

Dr. Migul Lopez Pumarejo, was appointed Ambassador of Cambodia in India on January 27.

President Kennedy appointed the famed television news commentator **Mr. Edward R. Murrow**, Director of U.S. Information Service on January 28.

Mr. T. H. Narayanaswamy Pillai, Vice-Chancellor of Annamalai University, was appointed member of the University Grants Commission, on January 30, in place of **Dr. V. S. Krishna**, who has been appointed Chairman of the Commission.

Mr. Giriraj Dharan Rastogi, newly elected Mayor of Lucknow, took the oath of office on February 1.

Mr. Bansi Kishore Mehta was installed on February 2 as the new Mayor of Agra.

Mr. Harold F. Linder, a businessman and philanthropist, was appointed on February 1 as President and Chairman of U.S.-Export-Import Bank.

Mr. James E. Webb, a former Under-Secretary of State, was appointed on February 1 as the new Chief of the U.S. Civilian Space Agency.

Mr. P. R. Nayak was appointed on February 4 as member of the Oil and Natural Gas Commission, in addition to his duties as General Manager of the Indian Refineries Limited.

Mr. S. K. Bannerjee will take over as Chief of Protocol from **Mr. M. R. A. Baig** from April 1, 1961.

The Governor of Bihar, **Dr. Zakir Hussain**, requested on February 8 **Mr. Benodanand Jha**, newly elected leader of the Bihar Congress Legislature Party, to accept the office of the Chief Minister. Earlier on February 1, **Mr. Dip Narayan Sinha** was sworn in as Chief Minister of the State. He will hold the office till **Mr. Jha** announces his new Cabinet.

RESIGNATIONS

Mr. Paul Henri Spaak, Secretary-General of the 15-nation NATO since May 1957, resigned on January 31 to return to

politics in Belgium. His resignation was accepted by the allied governments of the Atlantic Council on February 1.

The Israeli Premier, **Mr. David Ben Gurion**, resigned on January 31, on the subject of the Lavon Affair.

VISITORS

Malik Amir Mohammed Khan, Governor of West Pakistan, arrived in Amritsar on January 19 on a goodwill mission following the exchange of territory between the two countries.

Dr. Tulsi Giri, Nepal's Foreign, Defence and Palace Affairs Minister, arrived in New Delhi on January 19 to convey a message from King Mahendra to **Mr. Nehru**.

Queen Elizabeth II and her husband **Prince Philip**, arrived in New Delhi on January 21. The Queen is on a 47-day tour of four countries—24 days in India, 15 in Pakistan, 4 each in Nepal and Iran.

The Maharaja of Sikkim arrived in New Delhi on January 23 on a month's tour of India as a State guest.

Air-Marshal M. Sidki Mahmood, Commander-in-Chief of the U.A.R. Air Force, arrived in New Delhi on February 7 for a two-week tour of India.

Druk Gyalpo Namgyal Wangchuk, Maharaja of Bhutan, arrived in New Delhi on February 8 on a friendly visit.

Rev. Father Ismael Quiles, an Argentine philosopher, arrived in New Delhi on February 9 in the course of his visit to India under the auspices of UNESCO.

AWARDS

Republic Day honours were conferred on 41 persons this year, with the highest award, Bharat Ratan, going to **Dr. B. C. Roy**, Chief Minister of West Bengal, and **Mr. Purushottam Das Tandon**, former Congress President. None has received the Padma Vibhushan while 13 persons were the recipients of Padma Bhushan, and 26 have been named for the fourth award, Padma Shri. The recipients include five women.

OBITUARY

Dr. Sri Krishna Sinha (74), Chief Minister of Bihar, died in Patna on January 31.

Lord Dunrossit, Governor-General of Australia, died in Canberra on February 3.

The Second Marquess of Zetland (84), one of Britain's greatest authorities on India and a former Secretary of State for India and Burma, died in Richmond (Yorkshire) on February 7.

NEWS Diary



JANUARY

18. Prime Minister Nehru dismissed the Peking claim that no aggression had taken place on India's northern border.

India expressed her unwillingness to send a representative of hers to Laos in an informal capacity to report about the conditions in that country.

19. It was announced in New Delhi that the hereditary titles of former princes and rulers will lapse with the death of present title-holders, and will not pass on to their heirs.

The Afro-Shirazi Party, led by 56-year-old Sheikh Abeid Amani Karume, an ex-sailor, won the Zanzibar election by a single vote.

20. The former Yugoslav Vice-President, Mr. Milovan Djilas, who was serving a nine-year prison sentence since October 7, 1957, on charges of activities against the State, was released from jail.

21. The second-stage of a 98-foot Titan inter-continental missile failed to ignite at Cape Canaveral and the rocket plunged into the Atlantic 100 miles from the coast.

The Mali Republic formally requested France to evacuate its military bases on Mali territory.

The United States Army successfully launched a "Redstone" tactical rocket.

22. Prince Norodom Sihanouk, head of the State of Cambodia, withdrew his proposals for convening a 14-nation conference—an enlarged "Geneva Conference"—to deal with the situation in Laos.

23. The Portuguese liner 'Santa Maria' with 600 passengers aboard, was seized in Caribbean waters by 70 rebels armed with machine-guns, under the leadership of Ex-Captain Henrique Galvao.

Discoverer 19 earth satellite burned up as it entered the earth's atmosphere.

24. President Rajendra Prasad promulgated the Nagaland (Transitional Provisions) Regulation 1961, giving legal sanction to the interim administrative set-up in Nagaland.

Malta became the latest British H-bomb

base. Cyprus, Aden and Singapore had been established by the British Government previously.

25. Prince Norodom Sihanouk agreed to form a new government in Cambodia after leading politicians refused to accept the responsibility.

26. With the formal inauguration of the Panchayat Samitis, Orissa launched upon a new administrative set-up of decentralization.

27. Two U.S. airmen, held after their British-based RB-47 plane was shot down by a Soviet fighter last July, were released.

28. Brazilian Government grounded all U.S. Navy aircraft in Brazil which were taking part in the tracking of the Santa Maria from the Brazil. The ban was, however, lifted the following day.

President Ayub Khan inaugurated the Warsak project on the turbulent Kabul river, across the Durand Line in the strategic tribal belt.

Mr. Manubhai Shah, Union Minister for Industry, laid the foundation stone of a watch factory in Bangalore—an Indo-Japanese venture in the public sector.

29. It was announced in Madras that a scooter fitted with a self-starter, first of its kind in India, has been produced by Enfield India, Madras.

Mr. M Joseph Citeria, Minister of Information in the Provisional Ruanda Government, told a meeting in Usumbura that Ruanda had declared herself a Republic.

Burmese troops occupied the main bases of Kuomintang troops near the Thai-Laos border after a hard fought battle.

South Africa's Lower House of Parliament rejected by 91 votes to 50 an opposition motion of no-confidence in Dr. Verwoerd's Government.

Pro-Communist Laotian forces liberated Muong Hien, a post east of the Laotian royal capital of Luang Prabang.

Six new members of the U.P. State Council of Ministers were sworn in, bringing the strength of the Ministry to 21.

30. An unidentified aircraft dropped six bombs on Monono, in Northern Katanga.

An agreement was signed in Bonn between India and West Germany, substantially easing India's repayment position regarding Rourkela credits.

31. India suggested a complete reorientation of the U.N. operations in Congo. Setting out a three-point programme for restoring peace, India asked for the complete disarmament of all the Congolese forces, immediate stoppage of foreign aid, and release of all prisoners.

The Union Government instituted two new Services—the Indian Supply Service, and the Indian Inspection Service—for officers dealing with purchase and inspection work.

Masira island in the Arabian Sea was converted into a British military base.

Australia agreed to contribute credit worth nearly 2.8 million dollars to a world Bank consortium assisting India in the achievement of its Third Five-Year-Plan.

Dr. Rajendra Prasad declared open the Gandhi Museum and Library, set up by the Gandhi Smarak Nidhi near Rajghat in Delhi.

U.S. Scientists fired a male chimpanzee into space in a dress rehearsal of their man-in-space rocket project, but the capsule overshot its target by 130 miles.

A one-time high-ranking Nazi Officer, Hermann Hoeffle, was arrested in Salzburg, Austria.

FEBRUARY

1. The United States Air Force successfully fired its first solid-fuel Minuteman rocket about 5,000 miles into the South Atlantic.

The commandeered Portuguese luxury liner "Santa Maria" was renamed as "Santa Liberdade" (holy freedom).

A phased programme for the introduction of free and compulsory primary education in Punjab was announced.

Mr. Dag Hammarskjöld, Secretary-General, presenting his report to the Security Council, warned that civil war in the Congo had come closer.

A first group of 100 U.A.R. paratroopers left Congo.

2. Argentina successfully launched its first rocket. The rocket soared to an altitude of 25,000 metres from its launching pad in the Achala Pampa, Cordoba province.

A wave of uneasiness touched off in the U.N. Trust Territory of Ruanda-Urundi by

the announcement of a Ruanda Republic and the deposition of King Kigeri.

The U.S. Airforce sent a "cree" rocket to an altitude of 30 kms. for testing the braking system for future satellites.

3. A secret contact in Beirut between a British representative and the brother of the rebel Imam of Oman, about a settlement of Muscat and Oman problem, failed.

General Ibrahim Abboud, Sudan Prime Minister, reshuffled his Cabinet and included another civilian, Mr. Sayed Mokki El Manna, as Agriculture and Irrigation Minister.

4. An ordinance to enable the amalgamation of banks with the State Bank of India was promulgated by the President, Dr. Rajendra Prasad.

A communal violence broke out in Jabalpur following reports of assault by two youngmen on a girl student of a local college. A dusk-to-dawn curfew was imposed and an order under section 144 Cr. P.C. promulgated.

Tunisia decided to resume diplomatic relations with U.A.R. and Morocco.

India's latest indigenously-designed and constructed aircraft, a light communication plane, was given a demonstration flight at Kanpur airport. This has been named **Kanpur-1**.

UNESCO allocated \$1 million in its budget for 1961-62 to help India and other Asian countries in their primary education programme.

Prime Minister Macmillan denied that the West offered Russia a free hand in Hungary in return for a free hand in Suez in 1956.

Brazilian Admiral Dias Fernandez symbolically handed the liner "Santa Maria" over to the Portuguese Naval Attache Da Luz Cunha at Recife, Brazil.

Russia launched by a combination of rockets, a ship one-and-a-half times the weight of the previous largest flying laboratory. The ship was later named 'Isopolin' (Titan) because of the heavy weight.

5. The suspension of the Vice-President of KANU was declared illegal by its governing council.

Turkish Premier and Chief of State General Cemal Gursel carried out a major Cabinet shake-up, reestablishing the post of Vice-Premier, which was eliminated on January 4.

The Central Committee of Israel's Mapai Party decided to remove Mr. Lavon

from office as Secretary-General of the Histadruth Trade Union Federation.

The French Government announced that French citizens who take posts in foreign armies or civil services may be deprived of French citizenship.

The Laotian rightist strongman, General Phoumi Nosavan, symbolically occupied the airbase at Seno, southern Laos, still held by the French.

6. King Mahendra formed a National Planning Council, a sort of super Cabinet with overriding powers, to formulate and execute development works in the country. The King heads the council.

Cuba denounced Kennedy Administration because of \$4 million aid given by U.S. to Cuban "counter revolutionaries".

A big balloon was launched by a group of scientists of the Tata Institute of Fundamental Research at Hyderabad.

The historic Potala Palace in Lhasa, seat of the Dalai Lamas, was sealed by the Chinese authorities.

All the Opposition members in the U.P. Legislature boycotted the session as a resentment shown again Mr. C.B. Gupta's election as Chief Minister.

Mr. Hafiz Mohammad Ibrahim, Union Minister for Irrigation, laid the foundation stone of the Rajsamand Feeder Canal Project, costing Rs. 60 lakhs.

7. Mr. Nehru inaugurated the 14th World Health Assembly session in New Delhi. Later the Assembly rejected a Soviet move to seat Communist China in the WHO.

8. Cuban Government nationalized the Yateras Water Company on the grounds that its former Cuban owners had left the country.

King Mahendra placed army men in charge of the key departments of Defence and Home.

A "package deal" on the Congo was agreed in principle as a result of the latest round of consultations between India, the U.S., and the U.N. Secretary-General.

Sant Fateh Singh met Mr. Nehru in Delhi and it was stated that Mr. Nehru has turned down the Akali demand for a Panjabi-speaking State.

Indonesian authorities seized the largest Chinese owned firm in Indonesia.

9. Chinese spy aircraft, based in Tibet, were reported to be persisting in violating India's territorial air space.

France decided to suspend the atomic tests in the Sahara.

Peacock was chosen as the National Bird for the present by the Indian Board for Wild Life.

The Government of India reconstituted the Central Harijan Welfare Advisory Board and the Tribal Welfare Advisory Board.

Russia protested to France against an attack by a French military aircraft on a Soviet plane carrying President Leonid Brezhnev of Russia.

Arson, violence, and looting erupted in at least half of dozen towns of Madhya Pradesh due to the communal disturbances in Jabalpur.

A new Government headed by Mr. Joseph Ileo was announced in Congo to replace the Council of Commissioners, set up last September by the Congolese Army "strongman," Major-General Joseph Mobutu.

It was announced in Leopoldville that the deposed Premier Patrice Lumumba and two of his political colleagues detained in Jadotville Prison had escaped from custody.

10. King Mahendra announced the dismissal of 19 officials, including one Deputy Secretary and six Bara Hakims (heads of district administration).

Ata Mohammad, 31, a former revenue clerk, was hanged in Bahawalpur for the murder of Dr. Khan Sahib, 80-year-old leader of the defunct Republic Party, in May 1958.

11. Maharaja Pravin Chandra Bhanj Deo of Bastar was taken into custody under the Preventive Detention Act and his younger brother, Vijaya Chandra Bhanj Deo, was appointed, by Dr. Rajendra Prasad, successor to the gaddi. The privy purse of the new Bastar ruler has been fixed at Rs. 1.5 lakhs against Rs. 2.1 lakhs paid to the deposed ruler.

The Kashmir Premier, Bakshi Ghulam Mohammed, accused Pakistan of conspiring with China to rob India of some territory accepted by the world.

Moise Tshombe's forces occupied Leuna after Baluba rebels had withdrawn from the city.

12. Russia launched a rocket, called "an interplanetary station", in the direction of the planet Venus.

The Government of India communicated to Mysore Government its decision to take over the Kolar mines from the State.

APRIL 1961

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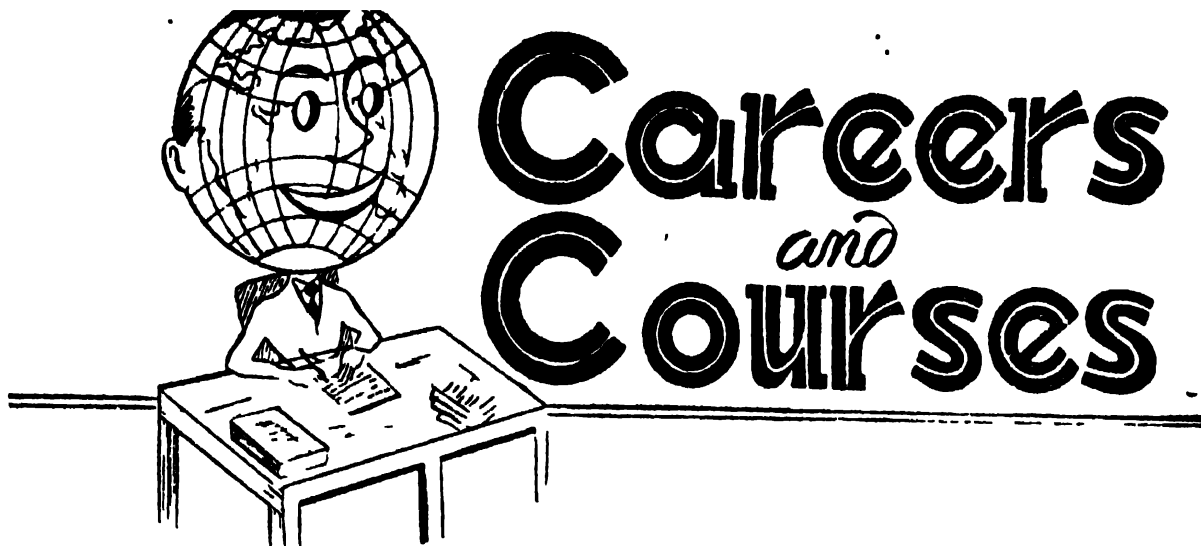
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EDITORIAL

OPERATION CENSUS

The tenth decennial population census of India has been successfully concluded and the data collected are being sifted and sorted out for the final report. The census operation started on February 10 and ended on February 28, 1961. The following five days, March 1 to 5, were devoted to check the figures and other information collected during the last 19 days of February. This work included scoring out the dead and adding the new arrivals and the left-outs. It is estimated that about one million enumerators visited more than 85 million houses, huts and shelters for census purposes. The States are having enumeration check to assess the accuracy of the huge amount of data collected. The provisional figures released by different States indicate 20 to 25 per cent increase in population. The provisional figure for total Indian population on March 1 (Reference Day) is given out as 430 million, an increase of nearly 100 million during the last ten years. At present about 80 census offices throughout India are engaged for sorting and tabulating the data. It will take a year or two to tabulate the information under different heads, such as religion, sex, literacy, profession, language etc., and the Census Commissioner's full narrative report may be published by the end of 1963.

The Census operations have grown in dimensions and importance since the first all India census in 1881. The result of the 1961 count will provide a wealth of data—compiled in 75 main tables as against 48 in 1951—that will be of great socio-econo-

mic interest. The census will provide information about the rate of growth of population, age groups, migration tendencies, rate and pattern of urbanisation, occupation and livelihood patterns, literacy, land ownership, unemployment, housing etc. In the current census a socio-economic survey of 500 selected villages was specially undertaken to measure the rate of social awareness and social change, as also a survey of cottage industries.

The 1961 census incorporated a number of new features. All the economic data is to be categorised in accordance with age-groups and educational qualifications. The occupational and industrial classification is also separated for the first time.

The Household Schedule was a new feature of the 1961 census. In the earlier India censuses, data was collected only in regard to individuals. It was thought that in the case of countries of such economic status as ours, where not all the goods produced entered the money market and where much of the goods produced were consumed by the family itself, collection of information purely on the basis of individuals tended to be slightly misleading unless such information were supplemented by information concerning economic activities of the household as an entity. The Household Schedule was designed, therefore, to collect data on the chief economic activities of the households in our country, viz., cultivation and household industry. (A household had been defined as a group of persons who lived together and took their meals from a

common kitchen unless exigencies of work prevented any one of them from doing so.)

Household Cultivation related to the extent of land, owned, hired or leased and the persons engaged in cultivation. Similarly in Household Industry, the nature of the industry, the period during which it was conducted, and the number of persons actively engaged in it were to be mentioned.

An important preliminary to the census was the compilation of a complete national house-list in which every single building was serially numbered within each of 750,000 census blocks. This house count was based on a close scrutiny of maps and records, a process which incidentally is of great benefit to the Survey of India and Directors of Land Records to whom all discrepancies are reported. The all-India house-list was completed in October 1960. It defined all factories and industrial establishments, gave the number of rooms in each dwelling (a room being defined as an enclosed area of not less than six feet by two feet), and the materials used in their construction (which data is of use to bodies like Planning Commission and the National Buildings Organisation). The house-list provided complete data on housing condition and congestion (In India, the one-room dwelling predominates).

The census questionnaire had been drawn up in consultation with the Union Ministries, the State Governments, the Universities, Chambers of Commerce and other specialised bodies. The final draft questionnaire was submitted for approval by the Government of India towards the end of 1959. The questionnaire was then translated into all the regional languages by the Centre (unlike previous occasions) to ensure uniformity. The questionnaire included 13 main questions and about 7 to 9 supplementary questions. Two questions asked in 1951 were dropped: the enumeration of backward classes and the "discretionary question" allowed to each State for questions for including questions on income and infirmities were rejected. Questions on both topics arouse fears and evoke evasive replies. There was also a question on infirmities (blind, deaf, mute, crippled) upto the 1931 census but it was subsequently dropped as the results were found to be very inaccurate. Out of the 13 questions in the Census Enumeration Slip five were related to what are commonly known as demo-

graphic data. They were: name and relationship to head of household, sex, age, marital status and birth place. The question on birth place had three parts: the actual birth place, whether the birth place was rural or urban, and the duration of residence at the place of enumeration, if a person was born elsewhere.

Another three questions were meant for the collection of social and cultural data. They related to nationality, religion, whether the citizen belonged to a Scheduled Caste or Scheduled Tribe, literacy and the educational standard attained, the citizen's mother tongue and whether he could speak and understand any other language.

The remaining five questions were for the collection of economic data. Four of them related to those who work and the fifth to persons who are not working. The questions were meant to find out whether a person was working as cultivator or as agricultural labour or working at household industry or doing any other work. In the case of persons engaged in work other than cultivation, full detail as to the actual work he was doing and the nature of industry, profession, trade or service in which he was engaged had to be recorded, as full information alone would yield useful information for development plans. In the category of unemployed persons were included housewives, students, infants, pensioners, rentiers, beggars, convicts, prostitutes and those seeking employment.

In ancient times the censuses formed the basis for military recruitment and taxation. But when the institution of census was again revived in recent times, it assumed a very different purpose, viz., to supply knowledge for the guidance of public policy and to "substitute certainty for conjecture" upon the vexed questions of facts which are vital to political action and foresight.

The census, as now conceived, has two main objects. It provides an instantaneous picture of the community—a cross-section of the body-politic exhibiting its constitution at the point of time when it is made. It thus affords knowledge of numbers and conditions which is valid for the particular point of time and, with approximations, for adjacent periods. But all things are subject to change; and knowledge of the force and direction of changes in the community are even more important than the facts at any given date. Hence in the modern census,

Each enumeration is conceived not only as a source of static knowledge but as an item in a consecutive series. From the succession of these alone can be ascertained and measured those great drifts and currents in the national life which, whether deemed good or evil, whether resistible or irresistible, must at least be known and reckoned with.

As the scope of the modern census has expanded, so the sphere of its utility has been enlarged. It still discharges its original function as an intelligence science of the government by which it is promoted in both legislation and administration. Estimates for various money-provisions under the heads of income and expenditure cannot be framed without the help of census material. Census statistics are the common tools and material of the business of government in ways too numerous to detail. In matters of defence the most pacific nation cannot afford not to know where it stands and whither it is tending. Questions of unemployment cannot be considered without a knowledge of the industrial disposition of the people. And for the public service in its widest significance the census provides material for research and study, helping to define and classify the issues on the great questions to which there is as yet no agreed answer, and which, so far from having been admitted within the sphere of government responsibility, are but vaguely stirring in the conscience of the community. The census is an instrument for the collection of information which is useful not only for the government but also of great utility to demographers, scientists, industrialists and planners of the nation.

Numbering of the people and national stock takings are known to have been conducted from very ancient times. The Old Testament records the enumeration at the Exodus of the fighting strength of the Children of Israel. Bible also relates the famous enumeration of fighting men, conducted by Joab, at the command of David. This action of David caused divine wrath to be visited on the people, thus providing the basis for public antipathy to the taking of censuses. Records survive of a complete cadastral survey and census of Babylonia comprising agriculture, stock and produce, which appears to have been carried out for fiscal purposes in the third millennium B.C. In the Persian empire, in China and in

Egypt similar surveys are known to have taken place for the assessment of fiscal, military or labour liabilities. The most notable example was the Roman census, from which the modern institution derives its name. Under this system the members and property of every family were enumerated quinquennially for the purpose of determining their civil status and corresponding liabilities. This system was first introduced by King Servius Tullius in 577 B.C. The Roman Census was extended by King Augustus in 5 B.C. to the Roman Empire and thus covered the whole of the civilised world of those times. The Roman Census perished in the wreck of the Roman Empire. Feudalism may have rendered the revival of census-taking, even when practicable, less necessary; and superstition may have contributed to its abeyance. The Christian Church remembered the punishment of Israel. Even in the British House of Commons in 1753 it was possible for the fear to be expressed that a numbering of the people would be followed by "some great public misfortune or epidemical distemper. It is, of course, natural that objections to taxation or military service should assume the cloak of religious scruple, but there must have been more than this. It is impossible not to infer that in the Old Testament story and in the purificatory sacrifice concluding the Roman Census folk-memory lingered on a punitive taboo. There is still a superstition among primitive tribes that counting of persons brings ill-luck on the family. Thus the old system of census died out a natural death and there was a long interval in census history until the mid-17th century, when a periodical census of the modern type was instituted in Western civilised countries.

Census, in modern usage, primarily denotes the periodical survey of the number and condition of the people, more fully described as "census of population" where necessary to distinguish it from census of production, census of agriculture and similar institutions. In modern times a census is an enumeration of the inhabitants of a country, accompanied by any other information that may be deemed useful. In most civilised countries such enumerations now take place at fixed intervals. The first census was attempted in Ireland in 1811. The first authentic census in France appears to have been that of 1700; since 1822 it has

been taken every five years. The first census in Russia was taken by order of Peter the Great in 1723, and it was decreed that it should be repeated every twenty years. In Prussia the practice of taking a census of the population dates from the time of Frederick the Great. The first census of the German Empire was taken in 1871, since when there has been a census every five years in Germany. Taking of census began in Sweden in 1746, in Denmark in 1769 and in Spain in 1787. In Great Britain, after proposals had been made and defeated in 1753, the census was definitely established in 1801. The first census of the entire British Empire was taken in 1871. Turkey began census-taking in 1927. From these and similar beginnings in other countries the institution of the census rapidly gained a permanent place in the organisation of nearly all modern States.

That a system of census-taking was prevailing in ancient India is evident from its mention in Kautilya's "Arthashastra" (300 B.C.). Kautilya describes in detail the method of a count of the population and their household effects to gauge the military potential of the country, as also for purposes of taxation. Megasthenes, the Greek Ambassador to India (about 300 B.C.) has also recorded the practice of special officials employed by India's rulers than to collect vital statistics. In Mauryan times (321 to 184 B.C.) there was periodical enumeration of the people. Centuries later, during the rule of Gupta Dynasty the census had assumed the nature of a permanent counting activity. In the region of Chandragupta Maurya (from 321 B.C.) a department for registration of births and deaths had been set up. With the advent of Muslim rule in India, the system of census had faded away until it was again revived in 1767 when under the behest of East India Company a rough computation of the population of Madras Presidency was undertaken. The first regular census was taken in Madras Presidency in 1822 when the East India Company had firmly established its hold there. The first systematic attempt to ascertain the whole population of India was initiated between 1867 and 1872. Though by no means a perfect one, it set some precedents that have been followed throughout subsequent censuses, among them the habit of using Government officials, receiving no extra pay, for the enumeration. (For the first time an honorarium of rupees ten

has been given to each enumerator in the 1961 census). The first regular decennial census began from 1881. Since then a new census has been taken every ten years and the tenth in the series has just been concluded.

The 1961 census has been the most exhaustive and the most searching in the Indian history. It can rightly be called the largest scientific count of population and the collection of demographic and economic data in the world. It will provide vital information to the Government, industry and political parties. It will give a clear picture of the impact of two Plans on the lives of the people and will provide a variety of economic and sociological data of great benefit to the future planners. The final census document would be of immense value not only to demographers but to all who are engaged in the task of national reconstruction whether in the field of academic research or in the practical application of development measures. Indian nation's true portrait will be reflected in the final results of the 1961 census and the facts and figures will have a great impact on the future of the country. It will provide valuable guidance for India's development in the years to come.

"I believe there are still some people who think that a democratic State is scarcely distinguishable from the people. This, however, is a delusion. The State is a collection of officials, different for different purposes, drawing comfortable incomes so long as the status quo is preserved. The only alteration they are likely to desire in status quo is an increase of bureaucracy and of the power of bureaucrats".—**B. Russell**

* * *

"Control gives rise to fraud, suppression of truth, intensification of the black market and artificial scarcity. Above all, it unmans the people and deprives them of initiative: it undoes the teaching of self-help".—**Mahatma Gandhi**

* * *

"The prevailing fashion in fiction of making heroes or semi-heroes out of delinquents, especially juvenile delinquents, is salutary in a way because it reminds us to be indulgent to other people's shortcomings as well as our own; but pushed too far it may become dangerous by enlisting too much sympathy for the criminal."

—**L. P. Hartley**

LESSONS OF INDIAN HISTORY

By HUMAYUN KABIR

Union Minister of Scientific Research and Cultural Affairs

(Following is a summary of two lectures delivered by Mr Humayun Kabir on February 20 and 21, 1961 under the Mohini Devi Foundation at the Gauhati University —Ed. C & C.)

India's past tradition and history have given a special meaning to her championship of the principle of co-existence among different peoples and outlooks of the modern world. Perhaps the most important lesson of Indian history is the way in which Indian society has, throughout the ages, sought to find a way of reconciling the diversities in her life.

Indian history, has also taught that diversity need not be an enemy of unity. India's insistence on the acceptance of co-existence of different economic and political systems and philosophical outlooks in international affairs is an attempt to project her experience to the world outside.

India's contemporary attempt to hold a balance between different points of view has been attributed by some critics to her fear of powerful neighbours as well as to a lack of intellectual clarity. If fear had been the prime consideration, India would have sought the alliance of powerful friends. But India has refused to do this. Her long history has taught India that no point of view is wholly correct and very few wholly wrong.

India has never accepted the Hegelian division of the real into a set of contradictions and still less Marx's attempt to equate the course of history with Hegel's conceptual analysis.

Indian history also does not bear out the criticism that toleration of differences has been a source of weakness for India. India is perhaps the only country in the world today with a continuous tradition of culture going back at least six, if not ten, thousand years.

Indian culture is also perhaps the most composite and complex culture that man has till now evolved. It is trite but true to say that India is an epitome of the world. It is the variety and diversity of her culture which has enabled India to survive. Whether we apply the test of survival value or of richness and complexity of culture, India's toleration and acceptance of differences have been factors of strength.

As to the course of India's cultural development from the days prior to recorded history, it is established that Indians have always welcomed contacts with people outside the sub-continent. Ancient Indian culture is composite in a multiple sense. The pattern which emerged out of the linking of the pre-Aryan and the Aryan is itself sufficiently complex but to this are added the elements which came with contacts with the West and the East.

So long as India accepted the diversity of her peoples and had unified them in a larger whole, she remained one of the major centres of culture and civilization in the ancient world. The flowering of the Indian genius in what might be called the Age of the Buddha, from 500 years before to 500 years after Christ, was one of the marvels of human history. Even at the time of Emperor Harshavardhana, the greatest latitude in religious and social thought and the widest toleration for Buddhism, Jainism and various forms of the Hindu faith prevailed. Later, however, there was a narrowing of interests and a growing rigidity in intellectual attitudes and social forms.

It was perhaps not accidental that the decay of ancient India began with the decay of the broad toleration and liberality that characterised Indian life throughout the Buddha Age.

The first appearance of Islam on the Indian scene added to the variety and complexity of Indian life, but did not involve any break with the Indian attitude to the world. For one thing, Islam did not come as a simple or unilinear force nor was it completely alien. Islamic culture itself was a result of action and counteraction among many forces. Besides, Indian philosophy had reached as far West as Greece and Egypt. There can be little doubt that some of these influences had reached the Arab mind.

By the time Moslem influence became dominant in India, Arab Mathematics and Science and possibly Arab Philosophy had

established more direct contacts with Indian achievements in these fields.

It should not be forgotten that the Moslems came to India not as conquerors but as traders and navigators.

For over a thousand years there had been contact between the Moslem and the Hindu and their common life profoundly affected the form and content of their society. Every Indian of today, whether Moslem or Hindu, is in a sense the inheritor of common heritage.

So long as these two major ingredients of Indian life lived at peace in the Middle Ages everything was well with India. For many Europeans India was in this age a promisedland where all religions were respected and man lived a life of ease and culture.

Akbar was able to establish a magnificent Empire because he worked in conformity with the genius of India and sought to combine in one system all diverse religious and linguistic groups. Aurangzeb, though a man of great individual ability, failed to preserve that Empire because he denied the Indian tradition of toleration of differences and sought to exalt the Indian-born Moslem above both the Hindu and the Moslem immigrant.

The advent of the West since the beginnings of the sixteenth century has profoundly affected Indian national history. The most important contribution of the West is a new scientific outlook which even if not unknown to India had never before become pervasive in Indian society.

The impact of the scientific attitude has for ever shattered the old moulds of our thought and initiated far-reaching changes in production and distribution, in social relations and in religious attitudes. Ideas of equality have transformed relations between groups and individuals.

The principles of Indian society are being reconstituted and a new meaning given to India's age-old search for achieving unity and harmony in the midst of diversity.

The astonishing transformation of the human situation, brought about as a result of the scientific advances, has, however, brought with it attendant dangers that threatened the very survival of man. A situation has been created where different peoples with different outlooks must learn

to tolerate if not also to respect one another. In the context of technological unification of the world the principle of co-existence preached by India through the ages has assumed a new urgency and importance.

The experience of India has shown time and again that the acceptance of diversity and co-existence of differences can alone ensure the survival of man. When Buddhism and Hinduism flourished side by side as in the days of Asoka or Harsha India also flourished. When one sought to curb the other both in the end suffered. Similarly, when Akbar found a formula for the co-existence of Hinduism and Islam, India attained the greatest height of mediaeval culture. When in Aurangzeb's regime their cooperation was disrupted, India again fell on evil days. Toleration and co-existence explain the astonishing continuity of Indian culture and offer the hope that man can survive in spite of the ideological differences which today divide the world.

Authoritarianism, denial of opportunity to all and the restriction of knowledge to selected groups have been three of the major factors for India's misfortune in the past. Denial of opportunity to all members of the community deprived society of the services of some of its ablest members. Ekalabya was a genius and in spite of social disabilities achieved mastery through his own efforts. He was nowever denied the result of his labour through social snobbery. It was not Ekalabya alone who suffered but society as a whole for it lost the services of an exceptionally gifted member who could have contributed greatly to the general welfare.

Whenever opportunities are restricted it means that some with the equality of leadership cannot reach the top. Nothing is more harmful for the community than weak and inept leadership and we have in Indian history many examples of the suffering of the people because of ineffectual rulers. In the past a weak or vicious king meant suffering for his own people but today ineffective leadership in one country may even lead to world conflagration.

Restriction of knowledge to special sections of the people follow from the denial of equal opportunity to all. Those in authority soon realise that knowledge is power and seek to guard such knowledge as

their exclusive preserve. The gap between the privileged minority and the rest of the people increases continually till in the end the community is overtaken by disaster.

Restriction of knowledge to small groups also tends to the loss of all knowledge. India was a pioneer in many fields of knowledge but was overtaken by other countries which aimed at the general dissemination of knowledge. At first the Arab countries and later Europe sought to make knowledge universal. Arab decline began with the restriction of knowledge to privileged groups but Europe marched steadily forward by expanding the facilities of education till opportunity has today become coterminous with society. In Indian society a microscopic minority was highly intellectual but the majority who were denied knowledge were inevitably denied privileges. This created an unstable society which like an inverted pyramid resting on its apex was upset again and again by attacks from outside or disturbances from within.

Denial of opportunity and restriction of knowledge also foster fissiparous tendencies within the community. Because people are divided in terms of privileges, social cohesion among members of the community is lost. Historians have pointed out that one major reason why Indian armies in spite of their bravery were often defeated by invading forces was the lack of cohesion among Indian troops. Where an entire people are involved no invader however powerful can make an easy conquest. In Indian history on the other hand the majority of the people showed little interest or concern for the fate of their armies. Because fighting was the prerogative of a special section, other sections of the people felt little or no response in defending the country.

The authoritarian structure of society has also led to undue dependence on the leadership of single individuals. Loyalty has been directed not to the country or the state but to a person. By contrast western countries have developed loyalty to the state and not to the individual. In a western army the death of a general has little effect on the soldiers who often achieve victory even after the loss of the general. In Indian armies the defeat or capture of the general meant immediate rout of the entire army. Dara Shiko's winning army

began to fly when a rumour spread that Dara Shiko had been killed.

Personality cult has also encouraged the tendency to acquiesce with evil. Because we depended exclusively on our leaders we left it to them to think and act and were content only to follow. Even when we saw evil and disapproved of it we waited for those in authority to take the first step to check it. Because loyalty was to a person rather than to a principle even a hero like Bhishma did not intervene to stop the outrage on Draupadi in the Kurava court.

Undue exaltation of the individual leads to exaggeration of his virtues so long as he is in power and undue condemnation when he falls from power. This is not the normal human approach where leaders are accepted with their qualities and their faults but we seek to create a demi god or an inhuman person. Complete dependence on the leader during the period of his ascendancy leads to loss of initiative and incentive among the followers. The recognition of the leader as the first among equals has not yet become the general Indian attitude.

Restriction of knowledge to selected groups has also led to the growth of intellectual snobbery among the privileged and passivity among the masses. In the earlier phases of Indian history the Indian people were not afraid of learning from others. They travelled to the farthest regions of the world but soon Indians became averse to learning from others and withdrew within their shells. A voyage across the sea became a social crime and knowledge from outside almost untouchable.

Because of her failure to draw upon the increasing knowledge of people outside India she fell behind in technology, her economy was weakened and her defences could not stand attacks from outside. The Europeans triumphed not because of superior bravery but because of superior technology and military craft. British Industries prevailed over Indian industries not only because of discriminatory laws passed by the British but because of the superior technology which followed the invention of the steam engine and the spinning and the weaving mills.

With the attainment of independence it has become a major objective of the Indian

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UNIVERSITY EDUCATION AND EMPLOYMENT

By Dr. V. K. R. V. Rao

In recent years, there has been a great deal of talk in the country about the incidence of unemployment among university graduates. The impression has been created that somehow the universities are responsible for creating this problem of the educated unemployed; and it has been suggested that they could remedy the situation partly by restricting admissions and partly by reorienting the education they offer in the direction of imparting a greater degree of employability to their graduates. Anyway there is no denying the fact that this relation of university education to employment has become a matter of acute public interest and universities can no longer ignore the problem on the ground that they are only engaged in education and have no concern with the employment of those to whom they impart education.

It is however good to get at the facts first. There are no complete statistics of employment and unemployment among graduates. It is however possible to get some idea on the subject by looking at the statistics of the unemployed who are on the live registers of the Employment Exchanges in the country. Thus we find that in 1956, the last year for which complete data are available, against 688072 persons who either passed the Matriculation or the Intermediate or the B.A. examination that year, no less than 221,500 persons were shown as unemployed on the live registers. This means about 33 per cent. It does not mean however that one in three is unemployed, for the live register does not refer only to those who have passed during the year 1956 but also includes the unemployed among all those who have passed in previous years. But the interesting thing to note in these figures is that it is not only graduates who are unemployed but also matriculates; and the incidence of unemployment appears to be greater among the matriculates, judging from the fact that the percentage of the unemployed on the live register to the number passed is 50.7 per cent in their case as compared to only 26.3 per cent in the case of graduates. Evidently it is possible to be unemployed without going to a university and the chances of unemployment seem to diminish rather than increase as one passes from matriculation to graduation. I have no doubt that the chances of unemployment must be even greater as one

goes down from matriculation to lower levels of education.

There is, however, no denying the fact that a significant number of graduates are unemployed; and this is naturally a matter of concern, especially in view of the fact that public funds are incurred in their education. It is also a fact that an unemployed graduate is likely to be a greater source of social and political unrest than an unemployed non-graduate and this is not likely to facilitate our economic development with peace and stability. It is, therefore, worthwhile finding out why there is unemployment among university graduates and then suggest what should be done to stop it.

An analysis made by the Directorate General of Resettlement and Employment of the unemployed graduates on the live register of Employment Exchanges showed that more than 70 per cent of them were pass graduates, 48.5 per cent being B.A.s and 22.7 per cent being B.Sc.s, B.Coms. accounted for another 12.9 per cent. Thus it is clear that what may be described as just general education or perhaps more correctly non-specialised education seems to make for a smaller degree of employability than specialised education that leads to either Hons. degrees or professional degrees.

When I was Vice-Chancellor of the University of Delhi, I got carried out an employment survey of the graduates of the University of Delhi, the inquiry being confined to the graduates of 1950 and 1954. As this survey was carried out with the co-operation and assistance of the Directorate General of Resettlement and Employment, it was possible to have a wide coverage and graduates contacted included not only those resident in Delhi but also outside, no less than 50 per cent of the entire body of graduates of these two years having been interviewed. It is true that Delhi University is only one among 41 Indian Universities and our graduates do not form more than 4 per cent of the entire body of graduates in the country. It is also true that employment conditions in Delhi are somewhat better than in other cities due to the presence here of the Central Government with its ever expanding departments. All the same, this is the first time in India that such an intensive study has been made of the employment conditions of university

graduates and the facts revealed by the study do throw light on some of the more important aspects of the problems of the educated employed and unemployed persons. I hope, therefore, you will bear with me if I share with you some of the facts emerging from this study.

The Delhi University survey has shown that no less than 96.3 per cent of the graduates of 1950 are found to be employed in 1958, the corresponding figure for the 1954 graduates being 90.5 per cent. The incidence of unemployment is higher for the 1954 graduates, thus showing clearly that the chances of getting employment improve with time for the graduate. It is interesting to note that the incidence of unemployment was greater for women graduates, varying from 12 per cent for those seeking employment from the graduates of 1950 to 21 per cent for those of 1954. At this rate it looks as if women are going to figure in increasing measure in the problems of the educated unemployed.

The second interesting fact that the survey has shown is that the bulk of the graduates go in for paid employment rather than set up their own trades, business or occupations. Thus as many as 80.8 per cent of the 1950 graduates were employed as against only 13.3 per cent who were self-employed, the corresponding figures for the 1954 graduates being 84.1 per cent and 10.2 per cent respectively. University education evidently does not seem to promote the art of entrepreneurship or in the alternative the commercial and industrial community does not seem to care much for university education. Neither alternative can be a cause for satisfaction in a developing economy, more especially when it lays so much stress on small industries.

When we look at the nature of the employment that graduates have, some light is thrown on the relation between the existing system of education and the kind of employment it seems to lead up to. Thus 60 per cent of the graduates of 1950 now occupy professional and technical positions, and 25.1 per cent clerical positions; only 9.8 per cent occupy administrative, executive and managerial position. For the 1954 graduates, the position is as expected, a little worse, those holding clerical positions being as much as 40.8 per cent. Let some of the readers get unduly impressed by the phrase 'professional and technical

position'. I must add that the bulk of this refers to teachers, the rest comprising investigators and technical assistants.

When we examine the academic qualifications of those who have taken to clerical occupations, we find that nearly two thirds of the Pass graduates of 1950 had become clerks, the corresponding figure for 1954 graduates being nearer 70 per cent. An interesting sidelight on science education is thrown by the fact that nearly 60 per cent of the B.Sc. Pass graduates of both 1950 and 1954 have taken to clerical occupations. When these figures for the Delhi survey are taken in conjunction with the figures I gave earlier of the dominance of Pass graduates among the unemployed graduates on the live register in the employment exchanges of the country as a whole, it is clear that Pass degrees—and these constitute the larger portion of our graduates—do not help to secure employment and, if they do, they only lead to clerical occupations for which in fact, the university education is not especially necessary.

Finally I may add that the Delhi University Survey has shown that the link between the field of specialisation and the job secured becomes greater the better the class of the degree. Thus, first classes and second classes have a better chance of getting employment of a kind where they feel their university education is of some use than third classes. Similarly, also their earnings are better. I must add that the silver lining in the cloud lies in the fact that given time, graduates without very high initial qualifications do move up to both specialised jobs and jobs with higher earnings, thus showing that job experience is as relevant to good employment as a high standard of university education.

I may now sum up the results of my study of University education and employment. The situation is not as bad as popular opinion depicts it. Graduates get employment and in course of time, most of them get some kind of employment. What is distressing however is that in the case of Pass graduates and of graduates with low academic records, employment takes time and even when it comes it is not of either an interesting or even of a reasonably remunerative character. Also there is no connection whatever between the general education obtained in the university and

the functional requirements of the employment secured subsequently. And such graduates constitute quite an appreciable portion, in fact a majority, of all university graduates. The situation is worsened by the fact that this kind of general education, which of course has some cultural and citizenship values, can be obtained after office hours through evening colleges and correspondence courses. There is no reason why time and money should be spent by such persons in the universities. Another reason for the lack of employment of some university graduates is their lack of any vocational aim and their failure to discover their special aptitudes or prepare themselves for the cultivation of their abilities. Finally,—and this is an important cause of graduate unemployment—is that the educated persons are seeking employment only in urban areas, as the type of employment sought by them falls at present almost solely within the pattern of employment obtaining in these areas. Not only does this attitude on the part of graduates worsen the employment situation, it also deprives the rural areas of educated personnel and prevents the integrated and even development of the country.

What is the remedy? Obviously you cannot expect me to give you a solution to this most complicated problem. I would venture, however, to give a few pointers that may help in the solution. Thus I would suggest:

(1) Pass Courses must gradually be removed from universities and examination standards altered so as to eliminate all third classes.

(2) Students joining a college should, in the initial stages as well as subsequently, have the benefit of vocational counselling, preferably through their own teachers who may have expert advice for the purpose.

(3) The proportion of scientific and professional education should be increased in the universities.

(4) University students must be oriented not to look with a hostile eye on rural employment and simultaneously amenities of rural life should be improved so as to make rural employment less unattractive.

(5) Evening colleges and correspondence courses should be provided for employed workers.

Ultimately of course the only remedy is economic development. If we go ahead with accelerating the pace of economic development and at the same time making full time university education more professional and scientific on the one hand and more directed to the cultivation of logic, reasoning and initiative on the other, I am sure we would have solved the riddle of the right relation between university education and employment.

Lessons of Indian History

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people to build up democratic institutions where equality of opportunity and universality of knowledge would guard against the repetition of the past tragedies of Indian history. The Indian renaissance began when the doors of knowledge were thrown open to all. India stood up against the mightiest empire in history and refused to compromise. The result was the achievement of Indian independence and the establishment of the Indian Republic. Free India has declared that all her citizens shall be equal in the eye of law, enjoy equal opportunities in education, wealth and welfare and work for freedom and prosperity of the world through peaceful and democratic methods.

Under the pressure of long and painful disease, poverty has been to me its own exceeding great reward; it has soothed my afflictions, it has multiplied and refined my enjoyments, it has given me the habit of wishing to discover the good and the beautiful in all that meets and surrounds me.

—Coleridge

It is with life as with a play—it matters not how long the action is put out, but how good the acting is.—Seneca

Books are the legacies that a great genius leaves to mankind, which are delivered down from generation to generation, as presents to the posterity of those who are yet unborn.—Joseph Addison

The Fortune of a book depends upon the pleasure it affords the reader.—Terence

A good book is the precious life-blood of a master spirit, embalmed and treasured up on purpose to a life beyond life.

—Milton

INDIA'S FOREIGN POLICY

By B. SHIVA RAO

Does our foreign policy, formulated in the early years of independence, call for any revision or modification in the light of the revolutionary changes which have subsequently taken place in the world? This question has been discussed in recent months not only with increasing interest but also with a measure of anxiety, even by people who freely acknowledge Mr. Nehru's prestige as a statesman of world rank and influence.

Eleven years ago, the Prime Minister defined his foreign policy as "a combination of idealism with national interest". Elaborating on this, he declared that "the pursuit of peace", to which he gave the highest importance, was to be sought "not through alignment with any major Power or group of Powers, but through an independent approach to each controversial or disputed issue". He mentioned four specific aims to which India attributed particular significance: (a) the liberation of subject peoples; (b) the maintenance of freedom, both national and individual; (c) the elimination of racial discrimination; and (d) a campaign against want, disease and ignorance in the world's backward and underdeveloped regions.

It was an admirable statement of free India's outlook in a world which had gone through the ghastly experience of two world wars in a single generation. The four objectives mentioned above were obviously of extreme importance, especially from the standpoint of a newly-emancipated country like India.

Non-Alignment

In the early years of independence, India's representatives at the U.N. made earnest attempts to practise non-alignment, voting on the merits of each issue. As pointed out by Mrs. Vijayalakshmi Pandit and Mr. B. N. Rau, in proof of the genuineness of this policy, India voted as often perhaps with the U.S. and the Western democracies as with the Soviet Union. The Commonwealth being a free association of free countries, bound together chiefly by an acceptance of the democratic way of life, its membership imposed no obligation to support other units or vote with them.

The liberation of subject peoples, in which India has displayed a vital interest,

has made considerable progress in the last decade. One should not ignore the great fact that since the end of World War II, of the world's 700 million dependent people not more than 100 million are now denied freedom. The vast majority of subject nations have achieved sovereign status, in accordance with the principles of the U.N. Charter. Nothing perhaps reflects this change more vividly than the presence in the U.N., as full-fledged member-states, of numerous former British colonies—a fact to which Mr. Macmillan made a telling reference at the last session of the General Assembly. Colonialism is disappearing at a rate which would have been regarded as impossible before the last war.

It is not only Britain that can point to the large slices of territory in Asia and Africa where she has relinquished her imperial authority; France's considerable Colonial Empire in Africa has shrunk from four million square miles to less than a million in the post-war era; while Holland, Italy and Denmark have in varying degrees yielded to the spirit of the times.

The Congo is holding our attention at the present moment because of Belgium's unwise handling of a problem which has created a situation of menacing proportions; while South Africa and Portugal have remained completely impervious to the liberalising influences which have swept over the globe as a result of the creation of the U.N. Nevertheless, there is the heartening reality that of 220 million people in Africa, no less than 178 million have attained political independence in the course of a little more than a decade.

India must of course support the demand for the liquidation of colonialism throughout the world, as she did in the last session of the General Assembly. But a general resolution such as was passed on that occasion, however commendable for its progressive intention, may not reflect a practical approach. The burden of self-government or independence will prove too heavy for a people untrained for its complex and manifold tasks; a period of economic, social and educational progress is essential for smooth transition from colonial status to complete freedom.

In referring to the liquidation of colonialism, another point deserves mention. At

the Bandung Conference in 1955, when a resolution somewhat similar to the one now passed by the General Assembly was under discussion, Ceylon's then Prime Minister, Sir John Kotelawala, sought a widening of the definition of colonialism so as to include territories absorbed by the Communist Powers. Mr. Nehru was then the chief opponent of such an extension of the meaning of the term; only a few weeks ago, he reiterated in the Lok Sabha this earlier stand of his.

The distressing fact is that in recent years our interpretation of non-alignment has been singularly unconvincing to a large number of people in India and abroad. Our record on Hungary and Tibet does no credit to the policy-makers of the External Affairs Ministry. The suppression of human rights in Tibet failed to secure from us support for even a mild resolution in the last session of the General Assembly.

Mention of Tibet brings me to another major weakness in our foreign policy. China's activities in Tibet, subsequent to that country's subjugation in 1950, have seriously imperilled our security. Three major roads to Lhasa, from the east, north and west, were built by the Communist rulers immediately in the wake of the tragic Tibetan episode—roads over difficult Himalayan terrain at a height of fifteen thousand feet or more. That was only the first step towards the domination of South Asia.

Chinese Expansionism

The systematic manner in which China has undertaken road construction in the last decade cannot be without an ulterior purpose. These roads are obviously for strategic use at such time as she feels ready to embark on the next stage of her expansionism. Along the entire Himalayan borders, from Ladakh to NEFA, subsidiary roads have been built in recent years, connecting every pass that leads into India. There is, in addition, a chain of aerodromes all along the region. The completion of the Peking-Lhasa railway, expected some time this year (much ahead of schedule), will mark the end of the preparatory phase of China's aggressive policy.

Competent observers estimate China's present military strength at between four and six million regular troops, with another fifteen or twenty million home guards. Her air force is powerful—it is believed to be

next in size only to that of the Soviet Union, the U.S.A. and Britain. She is building a fleet of submarines, many of which, as Mr. Chou En-lai took care to inform Burma's Premier U Nu during his visit to Rangoon in the summer of 1960, are being fitted with the most advanced propulsion. Some two thousand scientists are reported to be under training in China in the techniques of nuclear warfare.

It is in the light of such sinister developments that India must mould her foreign policy. Unfortunately, through unwillingness to grasp their significance in time, we have wasted precious years in spite of clear warnings about China's aggressive intentions. An expert committee, as Dr. Kunzru once remarked in a Rajya Sabha debate on Tibet, had as early as in 1951 recommended precautionary measures to strengthen our Himalayan defences. These were more or less completely ignored until the summer of 1958, as was Girja Shankar Bajpai's wholesome advice against placing implicit trust in China's professions of friendship, through all the years that he was Secretary-General of the External Affairs Ministry.

We must be sternly realistic in regard to defence matters. I do not believe that India can by herself discharge (in addition to maintaining her on defences) the heavy responsibilities she has assumed for protecting Nepal and Bhutan, except at a ruinous cost. Even as a measure of self-protection, one would expect our Government to grasp the initiative in seeking a positive understanding with Pakistan, Nepal and Bhutan.

Our primary concern in shaping foreign policy must necessarily be India's security. In the situation that has developed, the settlement of our disputes with Pakistan will greatly diminish our present responsibilities (and therefore our expenditure) in Kashmir, enabling us thereby to concentrate against a new threat of rapidly growing proportions. If India and some of her northern neighbours could come together for the purpose of making joint efforts for their mutual benefit in several fields, including defence, she might be able to build up a force sufficiently strong to exercise a restraining influence on China. Today our Government does not seem to recognise the need for such a positive, forward policy.

Isolation

On the other hand, we have allowed ourselves in the last ten years to be mano-

euvred by China into a position of isolation. The Government, for over four years, suppressed from both Parliament and the public the warning contained in the official correspondence between the two Governments and released it for publication only in 1958. In the last twelve months, China has been making great efforts to persuade Nepal and Burma to believe in her peaceful intentions; they remind me of a passage in E. V. Rieu's **History of Diplomacy**, "...aggressors often conclude friendly agreements with prospective victims to lull their vigilance, as both Hitler and Napoleon did".

"Challenging years", to use Mr. Kennedy's phrase, lie ahead of us—challenging for India as much as for the U.S.A. Every challenge means a fresh opportunity. India built up her reputation in the early years of the U.N. through a foreign policy that impressed the other members of the organisation by its sincerity. She can again play a similarly useful role in the immediate future, if she recaptures the position of moral influence in the world organisation that once was hers. But this cannot be achieved so long as we are open to the charge of observing double standards, with an obvious leaning towards the Communist bloc.

It is a new world in which India is called upon to function, a world altered beyond recognition in the past decade. One of the most striking changes of this period is vividly mirrored in the present composition of the U.N., whose membership has almost doubled in ten years, from 51 to 99. Even more significant than the rapid increase in membership is the shift in the importance of groups in the world organisation. Asia and Africa, whose voice and influence were subdued in the early years, have now between them 43 members.

India can hope to exercise a wise influence in the U.N. only if she pursues the path of non-alignment in a manner that is convincing to her fellow members. Non-alignment, like justice, must not only be practised but must appear to be practised. In this field we must acknowledge failure. Our second failure has been in regard to China. By her recent moves, India is attempting to isolate herself from her neighbours. The makers of our foreign policy have not seen clearly enough that the danger to our security is and will be from China, not Pakistan.

Bearing in mind these failures, which are proving costly, the shaping of India's foreign policy should no longer be the close preserve of the Prime Minister and Mr. Krishna Menon. There must be close and frequent contacts with men like Acharya Kripalani, Mr. Rajagopalachari and Mr. Jayaprakash Narayan and a few leaders outside the Congress before final decisions are taken on the important issues facing the world. Only thus can the Prime Minister hope to receive full national backing for his foreign policy.

(Courtesy: **Illustrated Weekly of India**)

BEING ORDERLY PAYS

One advantage of having life run along in good order is that good order tends to get the most out of things with the least labour.

It is 2,300 years since an Athenian writer gave as an example of disorder the actions of a farmer who threw into his granary barley and wheat and peas together, and then, when he wanted barley bread or wheaten bread or pea soup, had to pick them grain by grain, instead of having them separately laid up.

Discipline helps us to establish a pattern. Deep in us we dislike chaos.

When we succeed in forming a pattern it becomes familiar and comforting.

By following it we find that we can solve more problems with fewer false starts. We learn the pleasure to be found in a symmetrical life.

QUESTIONS & ANSWERS ON THE WEST BENGAL SECRETARIAT CLERKSHIP EXAMINATIONS (1955-'60)

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Asians And Democracy

By U Nu
Prime Minister of Burma

(Following is a summary of the speech delivered by Prime Minister U Nu before the Indian Council of World Affairs, New Delhi on November 14, 1960—Ed. C & C.)

During the last few years, quite a few westerners have asked me the question: Do you consider that Asians are fit for democracy? Every time this question is asked, I have some difficulty in controlling myself, particularly where the nationality of the questioner raises doubts as to his right to ask such a question. What upsets me about this question is its patronising tone. It implies that there is some sort of test which can be applied to all peoples, and that in applying it, the peoples of the West pass it, while the others fail to meet the required standard. It almost suggests a kind of political apartheid which I instinctively reject.

Nor is there the slightest basis for such an insinuation. If we take a good look at the nations of the West, we find that barely half of them are practising democracies today, and that in only a handful of them has democracy been firmly established. In view of this state of affairs, it would be just as permissible for us to ask "Are Westerners fit for democracy?" But of course we do not ask it because we realise that it would not be a fair question. It would not be fair because we know that the democratic system of Government, though the most desirable, is at the same time the most difficult form of Government to operate. No amount of academic study of democracy will by itself produce a democratic society. Democracy simply cannot be forced on a people, however enlightened the rulers may be. The basic principles of democracy have to be applied in each country in such a way as to suit local conditions, local beliefs and local customs. This means a slow process of gradual growth, and of education of the people. That is why, if we look into the record of those countries in which democracy has been firmly established, we will find that it has taken them hundreds of years to get where they are today. Most of the countries of Asia have been independent for just over a decade. This fact makes doubly unfair the question "Are Asians fit for democracy?" I suppose the correct answer to this question, even if it sounds a little facetious, is "Ask me in a few hundred years time, and I will tell you not only

whether the Asians but all the other peoples of the world are fit for democracy."

Now, what is it that makes democracy so difficult to practise? Democracy may be broadly described as freedom to do as one pleases subject to the legitimate rights and interests of others. In other words, it involves self-restraint, tolerance and forbearance, three virtues with which, unfortunately, human nature is not richly endowed. We know how difficult it is to practise these virtues within the confines of our own homes. How much more difficult then must it be for them to be practised by an entire people, at all levels, from the top to bottom. To these inherent frailties of human nature has to be added the corrupting influence of power. It is this combination which has been responsible for the failure of many of promising experiment in democracy. I speak here not only from my observations of developments in other countries, but from our own experience in Burma. Until we learn to combat this vicious combination, I fear there will be no future for democracy.

In practical terms, it means that a Government brought to power through a democratic election must continue to pursue the democratic path throughout its period of office. It will naturally wish to remain in office after the term for which it has been elected, but it must rely entirely on the vote for this purpose, and eschew all other means to perpetuate itself in power. This means not only that it must retain the confidence of the people, but that it must also give the opposition parties a fair chance to criticise the Government actions, to make their programmes and policies known to the electorate and to organize themselves. If in its eagerness to retain power, it uses that power to stifle the opposition, it is no longer treading the path of democracy, but is moving towards dictatorship. If, in its eagerness to retain power, it prevents the Courts from administering justice strictly according to the laws of the land, it is no longer treading the path of democracy, but is heading towards a dictatorship. And if it interferes with fair newspaper reporting and comment, it is

abandoning the path of democracy and taking to the road of dictatorship. In other words, a democratic Government must at all times resist the temptation to use its power and control of the State machinery in order to gain unfair advantage over its opponent and critics. It must recognise that it is inherent in the democratic system that another party may be brought to power at the next election, and it must work to produce those conditions in which the transfer of power to the new Government may take place smoothly and peacefully. A truly democratic Government must therefore be thinking not only of its own party interests, but also of the long range interests of the country, particularly the need to perpetuate the democratic system of Government. However, large may be its majority in the Parliament, it must have proper regard for the views and feelings of the opposition groups. Indeed, the larger its majority, the greater is the need for this to be observed.

But if, instead of doing these things, it became drunk with its power, and uses the State machinery to oppress all those who happen to disagree with its policy; if as so often happens in such cases, its leaders fall prey to wine, women, gambling and corruption, then that Government will not only have forfeited the confidence of the people, but even more serious, it will have led the country towards a dictatorship, and will have doomed it to change its Government by violent revolution, since there is no other alternative open to the people. A classic instance of such a chain of events is that of China where the Kuomintang Government, having made such a promising start, fell prey to the evils mentioned above, and lost the confidence of the Chinese people. Thereafter, it perpetuated itself in power through undemocratic means, but despite the receipt of massive foreign assistance, it was finally overthrown by the present Communist Government. History has since then furnished us with other instances of the same kind, but I do think it is necessary for me to particularise for the purpose of this talk.

In the final analysis, the success or failure of a democratic experiment depends on the human element. Good men are essential to the successful working of a democracy. As I see it, human frailties, and particularly addiction to one or more of

the main human vices—wine, women, gambling and corruption—is the greatest threat to democracy in Asia today. Having come to power by democratic means, many of our leaders have fallen prey to these evils, and have thereby forfeited the confidence of their peoples. In a long established democracy, such a Government would be thrown out by the electorate at the next election if not before. But in countries where a long tradition of democracy does not exist, these same corrupted leaders are only too often tempted to evade the democratic consequences of their conduct by adopting unfair means to perpetuate themselves in power. Every success in that direction spells danger to democracy, and if it continues long enough, the road is wide open to revolution and eventual dictatorship. In Burma we have a saying: "Only a gold cup is good enough to hold a lion's fat." Similarly, only good men can successfully operate a democratic system of Government. Therefore, if we want democracy to survive we must ensure that those we elect are men or women of proved moral integrity. Without it, democracy will always rest on frail and uncertain foundations.

I would like to conclude with a brief reference to the great democratic experiment on which India is now engaged. Those of us who believe with all our hearts in the democratic way of life have watched with admiration the successes which have been registered in this country in the last decade in the practice of democracy. We are encouraged and inspired by the progress made by India and will continue to follow it with the greatest interest and sympathy.

KEY TO SUCCESS

Three important things about knowledge.

1. That knowledge (though not necessarily a formal education) is absolutely essential to achievement.
 2. That an education sufficient for any desired attainment may be secured by any one with the ability to read.
 3. That if there is such a thing as a key to success it rests between the covers of a book.—J. C. Robers
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Forces Of Disintegration

By BABUBHAI M. CHINAI

The sincerity and energy with which we foster emotional integration will determine the fate of this country. Forces of disintegration have already done great damage to the national consciousness of our people in the last thirteen years. While apparently nothing seems to be wrong either with our Constitution or with our democratic ideals, the diseases of communalism, linguism and casteism have stealthily crept into the body politic and assumed a virulent form. Emotionally, the country is being dragged apart into narrow grooves of provincialism and sectarianism which had been the bane of Indian political life in the past.

We have to look back a century and a quarter and more to see the time, effort, organisation and sacrifices that were needed to awaken the Indian masses into a state of national consciousness and mobilise their energies for the struggle for freedom. The great leaders of our country, Dadabhoi Naoroji, Bal Gangadhar Tilak, Gopalkrishna Gokhale and others were the first to draw out the masses, who were closed within their own narrow walls of language, religion and caste, into the open to inhale the spirit of Indian nationalism. The great leaders of the cultural renaissance like Dayanand Saraswati, Vivekananda, Rabin-dranath Tagore, Aurobindo Ghose also broke the linguistic and regional barriers with their intellectual and spiritual appeal. Above all, it was Mahatma Gandhi whose political dynamism combined with his spiritual force carried forward the masses, with a complete sense of national unity to the goal of independence.

With the attainment of independence, the demands on national effort have increased. We have yet to overcome poverty, unemployment, illiteracy and economic and social backwardness and usher in an era of economic freedom, the ultimate goal for which political freedom was only a precondition. The country has just started on this march towards economic and social advancement and the Congress has set before the nation the ideal of a socialistic pattern of society and economy. This ideal cannot be attained except by strengthening the bonds of national unity.

In the face of a rising spiral of inflation and scarcity of food and cloth, there is

need for greater production and for intensive work. This calls for concentrated national effort. National planning demands national unity. It was unfortunate, however, that at a time when the need for national unity was so urgent the motive power behind Indian nationalism began to weaken as a result of the demand for linguistic States based on a creed which identified language with culture and culture with political frontiers. The whole country was thrown into a vortex of controversy, bitterness and uncertainty over this issue.

Red Menace

The democratic apparatus built up as a means to national unity was used to gain parochial ends. One unilingual State after another was carved out to contain the pressures from the sentiments that were roused by interested groups. The hope that the reorganisation would bring about the emotional integration necessary for building up the great movement for economic freedom has not, however, been fulfilled. There have been persistent demands for further vivisection of this country, inspired by the old evils of communalism, casteism, provincialism and linguism clothed in the garb of political and social activities.

The agitation over linguistic States and the atmosphere of tension and suspicion enabled the Communist Party, loyal to an alien ideology and a power, thousands of miles away, to infiltrate into, and join hands with, disgruntled organisations and gain power in the State of Kerala. The communal organisations, which had been almost vanquished and could not thrive in a climate of nationalism, slowly contrived to enter the political field in Kerala and other States where the emotional bonds between the different groups had weakened. The experience of the last five years has shown that both in regard to internal national development and external dangers threatening the territorial integrity of India, the Communist Party has allied itself with anti-national forces and fanned every passion for separatism. When the northern frontiers of India were occupied, it failed to join the rest of the nation in its resentment over the aggression and actually carried on propaganda prejudicial to national interests. It is indeed surprising that the followers of Communism should forget that

the country of origin of their ideology is itself a land of diverse languages, cultures and different nationalities brought together by a single creed and national interest.

The incidents which occurred in Assam recently were but a tragic culmination of the process started by linguistic and other centrifugal tendencies. The distrust and unrest prevailing in the Naga Hills area, the agitation for a Punjabi Suba, the proposed satyagraha in the South in support of the demand for renaming Madras as Tamilnad, are all the consequences of the process of political separatism started by the creation of linguistic States. The tone of the propaganda on this issue reveals the frenzy of bitterness which has been produced over the issue of language. Linguism, communalism and separatism have got so mixed up by now in their minds that there is no objectivity on the part of the group leaders in putting forward their claims. Nationalism has in fact come to mean to them no more than a constitutional and institutional unity determined by linguistic and regional interests.

Parochial Greed

The inter-State river disputes again clearly illustrate how national consciousness is being dimmed in the mind of the local Congress leaders themselves. The disputes have assumed such significance that the whole problem of the utilisation of the river waters of India which should be examined from the technical and economic standpoints for irrigating the largest area and increasing productivity to the maximum has been viewed from the narrow point of view of the benefits that accrue to a particular part of the country or sections of population delimited by State frontiers. Such an approach to problems of national economic development robs planning of a unifying force. The development programmes have only increased parochial greed for share on river waters, location of industrial plants and allocation of resources etc. The weakening of the sense of national unity has hindered economic progress.

The hurried displacement of English from its position as a unifying force among the intelligentsia, without adequate preparation to substitute Hindi as a common language is another factor in the process of disintegration. All are well aware of the bitterness that has resulted from this controversy over the medium of instruction

and the prevailing confusion and uncertainty. The public services have also lost their all-India character, with the increasing tendency to concentrate personnel belonging to one language group in their own linguistic region.

All these disintegrating forces are a potential danger to national unity and to the democratic structure of the country. Even some of the erstwhile supporters of linguistic States now confess to the 'dangerous potentialities of linguistic nationalism' and feel that 'looking back on all that has happened it would have been better not to have broken the multilingual States that we inherited from the British'.

It may be difficult now to unscramble the egg but when linguistic passions die down it will be worthwhile to examine if the present States cannot be grouped together into zones, at least for certain administrative and legislative purposes.

Acute Rivalry

The sixteen States today never think in terms of India as a whole. Inter-State rivalries have become so acute that even in regard to food the surplus States prefer to sit tight on their surplus supply of food grains rather than give it to the deficit States.

There is need for a searching analysis of the responsibility of the Congress and other political parties for the present situation. The Congress was the rallying centre of national unity until independence. But it is at present torn from within by groupism and casteism. This has led to lack of cohesion and discipline among the rank and file of the party. And this in a large measure has encouraged conflict between the party and its representatives in the Government?

The weakening of the democratic ideals in some of the countries of the East, the Chinese aggression on our own borders, the recent changes in Nepal and the general tension that prevails between the major powers, all emphasise the essential need for a firm policy in curbing the forces of disintegration. This can be done not by compulsion but by releasing such psychological forces as would promote emotional integration.

Minorities' Fear

The first need is to counter the effects of linguistic nationalism. Our Constitu-

tion, no doubt, has laid down the principle of equality of treatment. But in an atmosphere charged with distrust and with increasing attachment to the idea of economic and cultural self-sufficiency in linguistic States, there is a lurking fear in the minds of minority communities of discriminatory treatment. As Macatney put it, "The rule of the majority exercised more often under the title of a democracy is a true tyranny."

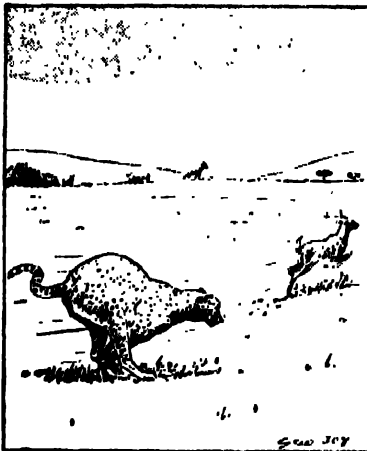
The Fazl Ali Commission which examined the implications of this issue recommended certain safeguards for minority groups to enable them to carry on professional activities in commerce, trade and industry, receive instruction in their mother tongue, use minority language for official purposes and receive equal treatment in the matter of recruitment to the public services etc. It is the responsibility of the Congress to remove all sense of fear or grievance from the minds of minority groups. The Governments, both at the Centre and in the States, should take effective steps to rightly interpret and fully implement the safeguards provided under

the Constitution, particularly in respect of education, the use of the mother tongue and recruitment to public services. It would indeed be a tragedy if an Indian citizen is made to feel an alien in his own country because he lives and works in an area of another linguistic or communal group.

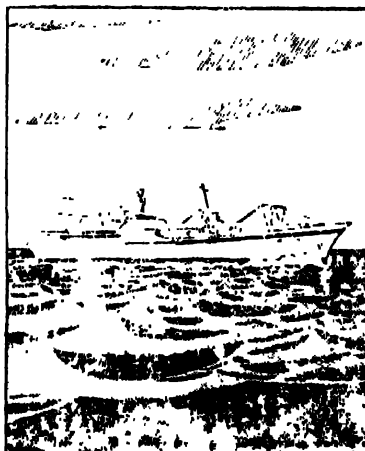
In a technological age, with fast developments in every field of social and economic life, it would be a gross betrayal of national interests if political parties look on with indifference at the revival of the old evils on casteism, communalism, linguism and regionalism and encourage the forces of disintegration. The Government should come to grips with the basic causes of disunity and fight every organisation or group or party aiming at the disruption of national unity for parochial ends. It should above all, bring all the States together in mobilising the efforts of the people, with spontaneous enthusiasm, for making this great country politically and economically strong. Who lives if India dies?

(Courtesy: Times of India)

DID YOU KNOW . . .



In India and the countries of Asia, men have been taming cheetahs for centuries to make use of their blinding 75-mile-per-hour speed in hunts. The cheetahs are caught wild and fully grown and are trained into complete docility in about six months.



The U.S. nuclear ship Savannah, will be the world's first atomic-powered merchant vessel, which was launched recently. Experts say the ship's speed may be 35 knots, and her cruising time before refueling will be 3½ years.



Muscles are the most important source of body heat. Under average conditions body muscles produce enough heat to boil a quart of freezing-cold water every hour.

National Unity and Economic Planning

By **Shri Shriman Narayan**
(Member, Planning Commission)

There is no doubt that even more important than the problem of raising the economic standards of our people is the problem of achieving emotional and cultural integration on a lasting basis. Although India has achieved considerable success in the sphere of planned economic development during the last decade and has earned notable prestige in international affairs, the fact remains that a variety of factors, linguistic, political, sectarian and psychological, threaten to precipitate a disintegration of the Indian nation and it is our bounden duty to make concerted efforts to avert this crisis in an effective manner.

As regards linguistic conflicts, I do not subscribe to the view that India has committed a fundamental mistake in giving more importance to the regional languages and in reorganizing the States on a more rational basis. Some of our States are even bigger than several countries in Europe and Asia and it is but natural that the regional languages of India should be given a fuller scope for their development as media of education as well as administration. Prof. Toynbee has pointed out that the problem of 'linguistic nationalism' is part of the price of the introduction of democracy as a result of which we must involve millions of our people in an active manner in the management of their own affairs. Mahatma Gandhi was of the definite view that the people of every region in India should have the fullest opportunity of conducting their education and administration through their own mother tongues. Acharya Vinoba Bhave also firmly believes that the reorganization of the country, more or less, on a linguistic basis should, ultimately, promote national unity in the midst of diversity. I do not think we can plan for stronger national ties among various parts of the country by suppressing the regional languages and imposing on them a foreign tongue, however rich and developed it might be. English in due course, must be replaced at the State level by the regional languages and at the national level by Hindi. I am, therefore, one of those who sincerely believe that the reorganization of the States in India has been a step in the right direction and there should be no cause for regrets.

This does not, however, mean that the other process of bringing about better national integration by releasing and strengthening various centripetal forces of cultural unity and solidarity should not receive much greater attention. I am sorry to state that while we have implemented the main recommendations of the States Reorganization Commission in regard to the demarcation of the new State boundaries, we have not taken adequate steps to implement those important recommendations of the Commission which were contained in Part IV of their Report. The States Reorganization Committee had recommended various safeguards for minority linguistic groups in the sphere of both education as well as administration. The Commission had also made several vital recommendations in regard to the recruitment of All India and State Services as well as the Judiciary. It was pointed out that special care should be taken by the planning authorities to secure a more balanced regional economic development in order to satisfy the legitimate aspirations of the underdeveloped areas in the country. It must be conceded by all of us that these recommendations have not been implemented so far with the requisite sense of urgency with the result that the centrifugal forces of linguistic nationalism are outpacing the centripetal forces of social and national cohesion.

Rational Distribution of Industries

The Planning Commission has recently appointed a special Working Group on Regional development in order to ensure during the Third Plan period that the vital interests of all the underdeveloped regions of the country will be properly attended to while framing programmes in different sectors of national economy. Even in the course of detailed discussions with different State Governments during the last two months, the Planning Commission has devoted special attention to the achievement of a better regional balance, particularly in the domains of agriculture, irrigation, power and large-scale industries. While determining the location of bigger industries both in the Central as well as the State sectors, every care is being taken to give the benefit of industrialization to those areas which have so far lagged behind. It

is true that the location of the projects in the Central sector have ultimately to be decided on sound financial and technical grounds and we have to keep the economy of the nation as a whole constantly in view. Nevertheless, there is considerable scope for achieving a more rational distribution of industries and other large-scale projects from the standpoint of balanced regional growth.

Three-Language formula right

It is, however, in the sphere of education that much more needs to be done in our country with a sense of emergency. While different States should be allowed to give due importance to the regional languages in the spheres of administration and education, it is necessary that every student is persuaded to learn at least one more modern Indian language in addition to his own mother tongue. The three-language formula decided by the Ministry of Education is therefore, a step in the right direction. But, I am again sorry to say that this language formula is not being implemented by different States in the proper spirit. I would also go a step further and suggest that students in Northern India should learn at least one of the four Southern languages in order to forge stronger ties of cultural unity between the North and the South. To begin with, every University in Northern India should try to specialize in teaching at least one of the Southern languages so that the cultural and literary traditions of the South are better understood and appreciated in the North. Similarly, the languages of the Eastern and Western regions should be learnt by the Indian students in a larger measure. In addition to the learning of these regional languages, I need hardly repeat that the knowledge of Hindi as an all-India language should be encouraged in a systematic manner both by the Central as well as State Governments. As an international language, English will naturally continue to occupy an important position in our educational system for many years to come although the knowledge of other foreign languages should also be encouraged increasingly.

We must always remember that the Indian Constitution recognizes only a common citizenship for the entire Indian people, with equal rights and opportunities throughout the Union. This fact is sometimes overlooked by us when we lay undue

stress on the constitutional rights of different State Governments as against the Union Government. It is, therefore, absolutely essential to think in terms of the basic unity of India while dealing with various difficult problems, economic, political and cultural. In order to enable the younger generation to imbibe this spirit of common citizenship, it is necessary to popularize the singing of the national anthem and the salutation of the national flag in all our educational institutions in a systematic manner. It is, of course, quite evident that the spirit of nationalism and India's unity cannot be imparted to our youngmen and women only in routine fashion. In addition to these valuable routine programmes, we must strain every nerve to spread a psychological atmosphere of national unity and solidarity through all other possible methods and programmes. In the ultimate analysis this could be achieved only by bringing to the fore the ancient cultural heritage of India and by keeping the four corners of the Indian sub-continent bound together in the ties of cultural and spiritual synthesis. Unless every Indian citizen cultivates the habit of regarding himself as an Indian first and everything else afterwards with almost a religious fervour, it would be very difficult to avoid the disintegration of the country in the future when the existing ties of distinguished national leadership gradually weaken in course of time. It is, therefore, imperative that we take all the necessary steps in various directions during the lifetime of our great national leaders in order to safeguard the future against the forces of disruption and disintegration.

(Courtesy: AICC Economic Review)

GIVE IMPULSIVELY

The secret of successfully giving yourself away is not so much in calculated actions as in cultivating friendly, warm-hearted impulses.

You have to train yourself to obey giving-impulses on the instant—before they get a chance to cool. When you give impulsively, something happens inside of you that makes you glow, sometimes for hours.

Frequently impulse-giving results in a new friendship, or leads to an interesting adventure.—David Dunn

Defects Of The Third Plan

By Dr. N. Das

The draft outline of the Third Five Year Plan envisages a total investment of Rs. 10,000 crores, out of which outlay in the public sector will amount to about Rs. 6,560 crores. Although the total investment and the outlay in the public sector are likely to be revised to some extent in an upward direction, the general pattern will remain more or less what has been stated in the Draft Outline.

The objectives in view are almost the same as in the Second Plan, viz, (a) to attain a rapid growth of the national economy by increasing the scope and importance of the public sector and in this way to advance to a socialist pattern of society; (b) to develop basic heavy industries for the manufacture of producer goods; and (c) to secure a large expansion of employment opportunities; and (d) to achieve a reduction of inequalities in income and wealth and a more even distribution of economic power. In concrete terms, the Plan envisages that the investment proposed will increase the national income by at least 5 per cent per annum.

Unemployment

Although the Plan dwells at some length on the sociological factors in long-term development (e. g. increase in population, of it is engaged in agriculture, the existence of large scale under-employment, low levels of productivity, dependence on more advanced countries for equipment and technical knowledge etc.). It appears to suffer from four main defects.

Firstly, there is no proper employment policy behind the Plan. The grim facts of the situation in regard to unemployment and under-employment have not been treated with the earnestness they deserve. The First Five-Year Plan ended with a backlog of about 5 million unemployed. The completion of the Second Plan is expected to leave about 7 million unemployed; and it is estimated that even the Third Plan, in spite of an outlay of over twice that in the Second Plan, will not be able to find employment for more than half the number of people who will be seeking employment during the Plan period. The Planning Commission frankly admits that there will be a backlog of about 11 million persons at the end of 1966 but it appears to be quite

content to continue to live with this problem.

The Second glaring weakness of the Plan is its confused thinking over the question of prices. According to the Draft Outline, inflation during the Second Plan period has been of the order of 20 per cent only. Actually it is much more: the figure of 20 per cent has been arrived at on the basis of wholesale prices, but, as is well-known, retail prices have been moved up at a much steeper rate. Yet, the Plan merely says that, with the progressive step-up in investment, an upward pressure on prices is inevitable.

Inflation

It has completely overlooked the fact that the rise in the prices has adversely affected the cost of living of the population at most levels and further inflationary pressure which investment programme of the Third Plan must cause additional sufferings to the common man. It is not disputed that some rise in the price level is inevitable in a developing economy, but the Planning Commission has made no concrete suggestion to arrest further deterioration in the situation.

The most disappointing feature in the section on Price Policy in the Draft Outline is that it merely repeats old platitudes. Not only that: it makes vague and often contradictory statements. On the one hand, it says that it is necessary for a developing economy to strengthen its internal defences against price rises.

On the other hand, it says that the surplus of public enterprise will have to be maximised—in suitable cases through adjustments in prices. Almost anticipating a criticism on this subject, it makes the naive statement that "price policy as well as the techniques of price regulation raise complex issues and involve a balancing of several conflicting claims." Curiously enough, it does not state what the several conflicting claims are and how they are going to be balanced.

The Third big weakness in the Plan is in its assessment of resources—both internal and external. Although the scope for deficit financing has been reduced (it was placed at a crazy figure in the Second Plan) the estimates of the resources which Gov-

ernment hopes to mobilise through additional taxation, savings and surpluses of public enterprises, is far too optimistic. One cannot help coming to the conclusion that the resources had been worked out in relation to the size of a Plan already decided upon, not the other way about. Despite the assurance that this is "within the limits of practability in view of the expected increases in national income and especially in food production", fulfilment of the additional taxation target of Rs. 1,650 crores over the coming five year period is not going to be easy.

As regards external resources, it has been estimated that the total requirement for the Plan is Rs. 3,200 crores, out of which Rs. 2,200 crores must be made available as budgetary resources for the public sector. Where will this gigantic amount of Rs. 3,200 crores come from? The balance of payments position has not only not improved, but is definitely deteriorating.

Howsoever favourable the international political climate may be for an all-out aid to India, it should not be forgotten that even countries like U.S.A., West Germany and U.K. have balance of payments problems of their own. Moreover, in the world of 1961-66 there will be many other claimants in Asia and Africa for external assistance from these developed countries.

Weakness

The last important weakness can be seen in Government's minimising the gravity and complexity of the organisational problem involved in pushing the Plan through a successful conclusion. We are already aware, how during the Second Plan period, the anticipated increase in agricultural production failed to materialise, mainly because of the lack of an effective organisation on the field.

In other sectors also, the crucial factor in the slow implementation of programmes was not inadequate investment, but inadequate organisation. And, by organisation, we mean not merely the administrative machinery of Government but the whole effort of the community.

One need not be surprised if the realities of the situation eventually force Government to cut down its programme according to its resources (both financial and human), just as it cut down the Second Plan target of Rs. 5,600 crores to

Rs. 4,500 crores after that Plan had been in operation for less than two years. Economic laws do not respect ethical or ideological aspirations: the inexorable logic of facts and circumstances may force to make a readjustment which it is not to visualise at this stage.

(Courtesy: **The Indian Express**)

HANDLOOM INDUSTRY IN INDIA

The number of handlooms under the cooperative fold has increased from 8.8 lakhs in April 1955 to 12.99 lakhs in April 1960.

The production of handloom cloth in the country has been progressively on the rise. As against 1,475 million yards of handloom cloth produced in 1955, the production in 1959 was 1,880 million yards. In 1960 (up to August), handloom cloth production totalled about 1,200 million yards.

The number of handlooms registered in the country upto March end 1960, was 27.53 lakhs.

As on March 31, 1960, there were over 10,414 weavers' cooperative societies. The number of weavers in these societies totalled 11.97 lakhs.

The value of handloom cloth exported rose from Rs. 5.2 crores in 1958 to Rs. 6.6 crores in 1959. During the period January-July 1960, exports were of the order of Rs. 3.0 crores.

By the end of March 1960, as many as 1587 sales depots, 34 inter-State depots, 48 Central depots and 38 mobile vans had been established to assist in the sales of handloom cloth.

A total of 433 dye houses, 42 pattern making factories and 9 calendering and finishing plants were also functioning as on the same date.

The number of industrial cooperative factories producing handloom cloth totalled 15, with about 2,000 weavers and over 1,000 looms. Three cooperative spinning mills, with a total spindlage of 38,233, were functioning at the end of March, 1960.

Upto the end of same period, 58 housing colonies for a total of 4,487 houses had been sanctioned. 1865 houses had already been completed and 779 were under construction.

WORLD BANK'S AID

By EUGENE R. BLACK

November 8, 1960, saw an important step forward in international economic co-operation: the inaugural meeting of the Executive Directors of the International Development Association, which launched IDA on its working career as a new lending institution. On that date there were already more than 20 member countries, contributing resources equivalent to well over \$700 million. By the end of 1960 membership had risen to 37 countries, bringing the total resources to \$852 million, and many more countries were preparing to join. For IDA's parent organisation, the International Bank for Reconstruction and Development, November 8 brought an eagerly-awaited reinforcement of the resources with which the Bank has been working since 1946 to improve the economic position of its member countries.

Explicit Aims

The World Bank, as the International Bank is informally known, was founded as a result of the Bretton Woods Monetary and Financial Conference of July 1944, which also gave birth to the International Monetary Fund. The Bank's aims are explicit in its formal title; the urgent problems of reconstruction were its major concern in the immediate post-war years, but its efforts since then have been concentrated on the long-term economic development of its 66 member countries. The Bank is associated with the United Nations as a specialised agency.

The Bank must lend with due regard for prospects of repayment, and it conducts its affairs so that it earns a return on its investments. Loans must be for productive purposes, and all loans other than those to member governments themselves, whether made to government agencies or private enterprises in their countries or territories, must bear the guarantee of the government concerned. The Bank must satisfy itself before lending that a proposed project is economically justified, that the plans for carrying it out are sound, and that the borrower will be able to meet the interest and principal repayments on the loan as they fall due.

The loan normally covers only the foreign currency costs of a project, and in-

ternational competition is generally required in placing orders for imported goods financed by the Bank. These are high standards, but they have been largely responsible for the Bank's continuing success and effectiveness.

The Bank started operations with only about \$700 million in available resources, at a time of acute economic crisis in Europe. Its first loan, of \$250 million, was made to France in May 1947, and was quickly followed by loans to the Netherlands, Denmark and Luxembourg, amounting to \$247 million. These loans paid for essential raw materials and equipment urgently needed if post-war reconstruction was not to be halted. With the adoption of the Marshall Plan in the spring of 1948, the Bank became free to turn to its long-term objective of assisting economic development in its member countries.

In March 1948 it made its first development loans—two loans to Chile for power and to buy agricultural machinery. The Bank's first Asian loan, in 1949, went to India, and loans to Australia, to Africa (Ethiopia) and to the Middle East (Iraq) followed in 1950. Lending reached an annual rate of \$300 million by the beginning of the 1950's, rose to \$400 million a year in 1955, and from 1958 accelerated to about \$700 million a year with a corresponding increase in actual loan disbursements. It has been estimated that in 1958 Bank disbursements provided about one-tenth of the total international flow of capital to the under-developed countries, and one quarter of the flow from public sources.

The Bank is now the world's most important source of multilateral development aid. Up to the end of December 1960 it had helped to finance more than 600 projects through 277 loans, totalling almost \$5,500 million, in 54 countries or territories. About a third of the total was lent in Asia and the Middle East, a quarter in Europe, a little over a fifth in Latin America, 14 per cent in Africa, and the balance of 6 per cent in Australia. Excluding the \$497 million lent in 1947 for reconstruction in Europe, \$1,667 million has been lent for transportation projects, \$1,631 million for electric power generation and distribution,

\$868 million for industry, \$461 million for agriculture, \$24 million for communications and \$205 million for general development.

More Loans

This pattern is likely to persist, as the Bank believes that it can best serve the interests of its developing member countries by concentrating its lending on basic services without which economic progress is almost impossible, and which, because of their cost, and yields, are unattractive to the private investor. At the same time, the Bank has always been anxious to encourage the development of industries outside the field of basic utilities. In some cases it has been able to lend directly to large private industrial companies—helping steel production in India, iron ore mining in Mauritania and paper manufacture in Chile, Finland and Pakistan. The Bank has also been able to channel about \$100 million to industrial companies in several countries by supporting local development banks.

Proposals for the establishment of a new institution to invest directly and without guarantees, in private productive industry in the developing countries led to discussions with interested parties; plans took formal shape; and in July 1956 the International Finance Corporation was established.

Although the Bank's credit was buttressed by its growing reputation, investors tended to regard the uncalled subscriptions of member governments, and particularly of the United States, as their prime guarantee of repayment. In 1959, with the total of Bank borrowings approaching the amount of the uncalled Government subscription, the Bank's authorised capital was increased to \$21,000 million, and member governments were given the opportunity to double their subscriptions. As the additional capital was not actually called up, the guarantee backing for the Bank's borrowings has now risen from some \$7,600 million to nearly \$18,000 million.

Flexible Terms

The years since 1945 have seen a marked increase in international lending, which in turn has helped to bring about a widespread and welcome rise in living standards. But many of the developing coun-

tries need further external capital to finance their priority programmes in amounts greater than they can afford to repay on conventional terms. This is the justification for the establishment of IDA, to make it possible for these countries to go on borrowing from abroad and so press forward with their development plans in the face of debt servicing difficulties.

Although the pattern of IDA lending has yet to be set—its charter is very flexible—it is authorised to lend on almost any terms, provided that they impose a lighter burden on the borrower's balance of payments than conventional loans and for a wide range of purposes. For instance, IDA may make interest-free loans for long periods—perhaps 50 years.

The Bank's main purpose is to find and lend the money needed for the economic development of its member countries. With growing experience, however, it has found itself increasingly able not only to make capital available, but also to suggest how to put capital to work. But a growing proportion of the Bank's technical assistance work is not directly linked with its lending. In 1949, at the request of the Colombian Government, the Bank organised a survey mission which analysed the economy of Colombia and suggested the lines along which it believed development should proceed during the subsequent decade. This mission proved to be the first of about 20 which since performed the same task for different countries.

Thus the Bank is helping the developing countries on a broad and still widening front. Naturally its emphasis remains on the financial aspects of development, because money is its main resource, and the making of loans was its original purpose. But its activities, and those of its affiliates, are close related to the whole United Nations effort to wise living standards throughout the poorer regions of the world.

In those vernal seasons of the year when the air is calm and pleasant, it were an injury and sullenness against nature not to go out and see her riches, and partake in her rejoicing with heaven and earth.

—Milton

POLITICAL PARTIES AND PEOPLE'S INTERESTS

By **SHRI MOHANLAL SAKSENA, M. P.**

Successful working of democracy demands that there should be continuous contact between the people and their representatives and frequent opportunities of consultation between them. But our experience so far has shown that there has been practically very little contact between the two; excepting a few months before the elections, people hardly come into the picture. Even then they have no voice either in the framing of party manifestos or the setting up of candidates who are to be their representatives and are expected to speak on their behalf for a period of five years or so. Notwithstanding certain formalities regarding selection of party candidates the final choice essentially rests with party bosses with whom personal or group loyalty counts more than ability, integrity and other personal qualifications of aspirants such as their past record, social outlook and popularity. Besides personal and group loyalty another factor that is often taken into consideration is their caste or creed. After elections, it therefore becomes the main concern of the elected candidate to keep himself in the good books of party bosses rather than keep in touch with the people and work amongst them for obvious reasons. For even if he served his constituency as he should there is no certainty that he would be selected for the same constituency over again, if the party bosses did not wish it. On the other hand if he could manage to keep the party bosses pleased, he was sure to be selected as a candidate from the same constituency, irrespective of the wishes of the local people or from some other constituency or failing that for the upper chamber. Under these circumstances, sycophancy, mediocrity, opportunism and careerism come to the fore and dominate parties suppressing integrity, frankness and self-respect in the rank and file and workers wedded to principles have to suffer and keep behind. This ultimately results not only in paralysing of large numbers of upright and capable workers in each party; but also deprives the people of control over their elected representatives. Attention has been repeatedly drawn to these evils in the meetings of the A.I.C.C. and at Congress sessions but without any adequate results. Other parties do not appear to have done anything to eradicate them. That only

shows that according to the present working of political parties not only people's interests are overlooked when they come into conflict with party interests; but even the latter are sacrificed for personal ends and group rivalries. It is no good to point out that similar evils exist in political parties in other countries. For if we are true to our past professions we shall have to devise ways and means to eliminate them or failing that to adopt some other system by which we may be able to establish Swaraj in the real sense (i.e.) government of the people by the people and for the people. To put it differently political parties have, for the present, become possessed by lust for power and spirit of self-aggrandisement and are not likely to subserve people's interests or strengthen democracy unless they are purged of these evils and until they make the people's interests as their overall concern, pay particular heed to the preservation of purity of public life, pious platitudes, ambitious party programmes, and vote-catching slogans will be of no avail to the people. So political parties have to function primarily in people's interests, promote their well-being and preserve purity of public life, otherwise they become scourge for the people, bode ill for the peace and progress of the country and become a positive danger to freedom and democracy. It may also be mentioned here that even in countries where parliamentary democracy has been working for generations, during the time of a national crisis like war, natural calamities etc. political parties coalesce and the national danger is fought on the basis of common front. Notwithstanding twelve years of freedom, as the President, Dr. Rajendra Prasad, pointed out the other day, the people do not feel its glow. We have not yet been able to shake off poverty or unemployment, hunger, disease and ignorance which have gripped the people for decades. They are admittedly our worst enemies, even worse than war, which is but a passing phase and have to be fought, as is recognized by all political parties, on a war footing. The question naturally arises as to why so much emphasis is then being laid on party labels and differences. Notwithstanding assertions to the contrary very little difference is found, in practice, for whatever differences there may be in

the long run, they are of no consequence to the people in the near future. If the election manifestos of different parties are examined dispassionately we are sure to find a large measure of agreement underlying them. There is no difference in regard to foreign policy based on what are known as Panch Sheel principles which, thanks to the vigorous efforts of Prime Minister Nehru, have come to be recognized by most countries now. Nor there are any vital difference in the matter of defence. There is also unanimity about the imperative need for carrying on countrywide crusade against unemployment, illiteracy, hunger, disease and corruption. Of course there are bound to be differences in outlook, approach and pace amongst the parties. But even they could be ironed out, on some agreed basis or reduced to the minimum by applying certain agreed tests to the solutions suggested by various parties. For instance in spite of party differences, there is considerable agreement on planned economy, and service co-operatives for farming.

So instead of accentuating differences and trying to make capital out of them, if the political parties could concentrate on the immediate problems of people with a determination to solve them and to strengthen national unity, freedom and democracy, I feel sure they should be able to produce a very-wide area of agreed activity, in which they could jointly participate and which should be made an integral part of their programmes. It would be appropriate to give extracts from what I had written about Congress election manifesto in 1951:—

Election Manifesto

"As regards election manifesto I would like it to be radical but realistic. Instead of slogans and catch phrases like 'classless and casteless society', 'social justice' etc. I would like the Congress manifesto to be a bare narrative of its achievements in the past with a time-schedule for the achievement of its immediate and distant objectives. Instead of holding out promises of all good things in the world, but in God's own good time, as is the trend of party manifestos, I would like it to be a workable scheme of things which may ensure to the people in the near future a little more food in the stomach, a little more cloth on the body, a stronger roof over-

head, easier reach to medical aid, larger opportunities of training and employment and freedom from clutches of the corrupt official and grabbing intermediary. I have not the slightest doubt that it is possible. . . Not only a few dozen big schemes requiring considerable time and money, foreign machinery and experts, but hundreds and thousands of small schemes spread all over the country which, with the assistance of lakhs of idle hands could be executed in months instead of years, will serve the crying need of the moment. If hundreds of thousands of acres of land is to be reclaimed and brought under cultivation in order to achieve self-sufficiency in food, we cannot afford to wait until we have imported the requisite number of tractors... Similarly greater attention has to be paid to the development of cottage and small scale industries than has been done so far".

Though my suggestions were largely ignored subsequent developments have convinced me, more than ever, that this would have been the right approach to people's problems and that should be the basis of all party manifestos. Indeed this could become the basis of people's demands which different parties may be required to adopt.

Again by reducing the spheres of conflicts amongst the parties not only the area of agreed activity could be further widened, but a lot of time and energy of public workers could be saved and utilised for constructive work and welfare activities. For instance since the advent of Independence I have been of the view that Congress and other all-India and State political parties should not participate as such in district and local bodies' elections even as the Congress keeps aloof from elections to the village panchayats.

The need for suitably regulating the formation and functioning of political parties in the interests of the people and to safeguard democracy cannot be emphasized too much; but it is equally important to define the field of their activities. With a view to arrive at right conclusions we have to carefully consider and answer a few fundamental questions. Should party politics be allowed to permeate people's life from conception? I am sure having regard to past traditions, and genius of the people the consensus of opinion in the country would be an emphatic 'no'. But apart from that, I may give here certain very cogent

reasons in support of this view. Firstly, for obvious reasons it cannot but undermine the foundation of people's freedom and weaken the roots of democracy. Secondly political parties though professing to work for the good of the people can never strengthen people nor themselves. For, in their struggle for power their foremost concern is to strengthen themselves and somehow to get the better of other parties and having done so they claim to know and represent the people more than the people themselves. Anybody inside or outside the party opposing the majority view is branded as a renegade or reactionary and is dealt with accordingly. Moreover the strength of parties can never be a substitute for the strength of the people even as the strength of a tree is not the strength of its branches but the strength of its trunk, the part wherein the branches coalesce and cease pulling in different directions. The party in power often professes to act as the bodyguard or the protecting arm of the people against external and internal dangers; but where is the guarantee that it itself would not be overpowered by superior force or succumb to temptations of power. But history is full of such instances where the protectors have either been overpowered by others or have themselves become exploiters and the proteges had to suffer in either case. Therefore, the foremost concern of every political party should be to build up the strength of the people, for if the people are strong and well-organized, parties may come and go, but the people shall be able to take care of themselves without any fear of falling victims to chaos or exploitation. Even till the advent of British rule the pattern of society in India was such and people's life was so organized that the change of rulers in the capital cities had very little impact on the day to day life of the people.

Party System and Body Politic

The next question to be considered, is to what extent party system should be allowed to enter our body politic, for under the existing conditions it cannot be eliminated altogether as some of our leaders contemplate. It has therefore to be regulated and its scope carefully defined with full regard to people's interests and well being. I am definitely of the view that political parties can make more effective

contribution to salvage people's problems if they confined their activities to the Union and State Governments and legislatures instead of poking their nose into every phase of people's life or into the working of different institutions. Since healthy difference of opinion is the very sign of life, I shall be the last person to suggest that they should in any way be suppressed; but I would not like them to be on the basis of cleavage amongst political parties. Even, otherwise, it would be in the best interests of the people, if instead of frittering away their time and energy, political parties adopted some such course and restricted their field of activity. This is an important question and requires careful consideration by every political party to prevent further deterioration in public life and to safeguard people's interests. I may refer here only to some of the activities from which I feel sure political parties should keep out in national interest. The desirability of political parties keeping out of youth and student activities cannot be emphasized too much. As future citizens and leaders of society, they deserve utmost attention, parental care and prudent guidance, from every public worker irrespective of political views and party affiliations. To use them as pawns in our game of power politics, is, to say the least, short sighted and suicidal policy.

Again there is widespread exploitation of educational institutions for party purposes and personal ends. Apart from undesirable repercussions such abuse is bound to have on the institutions themselves, it militates against the basic principle of democracy, that in no circumstance there should be any interference with the exercise of his free choice by an individual. This has therefore to be ended forthwith by mutual agreement of parties if possible or by legislation if necessary. Vidya Mandirs or temples of learning, should not be allowed to be sullied by the vulgarity of power politics.

Kisans and mazdoors constitute the bulk of the population of India as in other underdeveloped countries. They have been subject to all manners of exploitation and disabilities for long, and have consequently suffered great hardship and misery. They are the principal producers of our wealth and the mainstay of the nation and no economic or social progress is possible with-

out their enthusiastic support and whole-hearted co-operation in the national endeavour. They, therefore, become our primary concern and every political party should deem its duty to work for the redress of their grievances and the amelioration of their hard life. But the question remains whether that is to be done through separate party organizations. Could the objectives of strengthening kisan and mazdoors and securing for them better deal and social justice not be sooner achieved by united effort of all the parties? Mahatma Gandhi had always been of the view that they should not be exploited for power politics and that when they had become conscious of their non-violent strength no power on earth could resist them. He was definitely opposed to kisan and mazdoor organizations taking part in party-politics and wanted them to concentrate on building up their respective strengths and working for the welfare of their constituents. I feel the political parties would do well in following this wholesome advice of the Father of the Nation and not splitting labour and kisans on party line. But apart from Gandhiji's view, our past experience of the working of trade unions and kisan organizations, leads to similar conclusions. So in the interests of workers' and peasants' solidarity and welfare as well as in national interests it is desirable that power politics is eschewed from labour and peasants' organizations and they are run on a non-party basis. Different political parties should, of course, have their kisan and labour departments for the study of their special problems and may woo the peasants and workers on the strength of their policies and programmes but without disrupting them organizationally.

Need for Political Education

Again since the greatest danger to democracy emanates from the ignorance and indifference of the people it should be the foremost concern of all democratic parties to fight them. But though it may sound paradoxical, political parties subsist, to a certain extent, on these very short-comings of the people. Not only that, instead of educating and enlightening the people—their masters—they often try to confuse and hoodwink them to serve party interests. So political parties cannot be depended upon to educate and galvanize people or to build up strong, well-informed and

alert public opinion in the country which is the very life-breath of democracy and the most effective safe-guard for people's interests. This work has therefore to be undertaken, with a sense of dedication and carried on with missionary zeal on a non-party basis by votaries of freedom and democracy irrespective of party affiliations. Ordinarily there should not be any room for conflict between our loyalties to the people and the party; but if ever any such conflict arises I have no doubt loyalty to people should always prevail.

In conclusion I may add that if for one reason or other political parties are not able to rise equal to the occasion and work as suggested above placing people's interests above party ends, it becomes the duty of the people who have to suffer the consequences of their wrong approach and short-sighted policies to be up and doing before it becomes too late. For no party can subsist without popular support and if the people are so minded they can bring the parties to their senses as in a democracy supreme power rests with the people. If the people become sufficiently conscious of their power and have the will, they should surely be able to devise ways and means to make it felt by the parties and the administration and have not to wait till elections.

HOW TO BEAT FATIGUE AND INDECISION

One of the major sources of chronic fatigue is indecision, which arises from a disunion of the personality. Those who suffer the agonies of indecision over small as over big issues, harbour one of the most virulent of fatigue toxins.

We all know them—the man who changes his mind from day to day about signing a contract, the woman who recalls the waiter half a dozen times while ordering a meal—and we recognise a habit that underlies all their thinking.

They are the constant prey of doubts, conflicts, fears, until they can establish the habit of a positive attitude towards their difficulties, they cannot gather much momentum.—**Marie Beynon Ray**

* * *

Reading. . . . is one of the great and satisfying pleasure of human living.

—**Norman Lewis**

Hazards of Radio-Active Materials

By Shri R. S. Gupta

Since the last great war, atomic power is being increasingly used in industrial, agricultural and medical spheres. Any carelessness in the use of radio-active materials may cause fire, explosion or injuries and damage to vital organs of the body and finally result in death. This has, therefore, brought in a new problem to the world.

Radio-active materials emit "pulses of energy" and invisible flying bits of matter. This is known as 'radio-activity', and these sub-atomic particles are called alpha and beta particles. The pulses of energy in the form of electro-magnetic rays, similar to X-rays, are called gamma rays. The latter has a very high penetrating power and is the most dangerous. There is no protective clothing, which can stop the penetration. It is only the distance from the source together with heavy shielding by thick lead or concrete partition that will have some effect.

Radio-activity itself does not introduce any fire and explosion hazard. Radio-active elements and chemical compounds have fire and explosion properties, identical to those of the same materials when not radio-active. But the hazard to life during fire or explosion will be very high when radio-active material of considerable strength is liberated into the atmosphere in the form of vapour, gas or dust, since it may then be inhaled or swallowed, causing severe internal injuries.

Natural Radiation

The exposure of individuals to radiation is not a new phenomenon. Everyone on earth is being irradiated continuously by cosmic rays from the sun and by radiation from the normal amounts of radio-active materials on the earth itself. Even the radiation from the luminous dial of a wrist watch is not considered insignificant, but physical damage from this amount of radiation is generally regarded as negligible.

Uranium metal, the commonly used fissionable material, is hazardous and in form of powder; it ignites spontaneously. Water should never be used to fight such a fire, as it will evolve hydrogen and can cause an explosion. Similar is the case with sodium, or potassium. Thorium in the form of dust is also considered to be a fire hazard, when exposed to

heat or flame or a chemical reaction with oxidisers.

Radio-active materials contained in sealed containers in metallic capsules with screwed and soldered tops, present very slight hazards of contamination, provided the container does not melt or the cap does not get detached.

The container also should be free from any moisture, since nuclear radiation can cause decomposition of water into hydrogen and oxygen, creating a possibility of an internal explosion of sufficient intensity to rupture the metal housing and scatter the material. The use of glass capsules for radio-active materials should be discouraged.

Storage and handling of radio-active materials should be isolated and they should be handled on lower floors, where contamination will have less chance to spread to other areas. Buildings used for processing or storing large quantities of radio-active materials, should be located well away from other important buildings or congested localities to avoid the possible air or water borne radiations in case of any fire, explosion or windstorm.

Buildings storing radio-active materials should preferably be of single storey height without basements, and the construction should be non-combustible, including interior finish, acoustical or insulating treatments and partitions. The floors should be smooth and easy to clean and water-tight with special drainage facilities for the discharges from the sprinklers or hose pipes or other liquids that could spread radio-active substances.

In addition, a fire squad from amongst the workers should be organised and trained in emergency procedures like confining the fire to a small place, cordoning the area, parking the appliances on the windward side of the installation on high ground etc in case of any accident. They should be supplied with protective clothing like lead apron, lead gloves, etc. and self-contained breathing apparatus.

Portable instruments for detecting radio-activity and its intensity should be provided to the squad. The squad should also be trained in the decontamination procedure and be aware of the radiation

(Continued on page 332)

The Moon's Hidden Face

The Moon always turns the same face to the Earth since it rotates on its axis in the same time that it takes to revolve around the Earth.

Millions of years ago, it used to turn on its axis faster than it does today, completing its rotation in a matter of hours. But the forces of tidal friction, caused by the gravitational pull of the Sun and the Earth, gradually slowed down the Moon, lengthening its rotation period to 27.32 days.

For the past 350 years, telescopic observations have been made of its visible face. Observers on Earth have been able to study and record on maps 59 per cent of the Moon's surface. (59 and not 50 per cent because, owing to the Moon's librations or oscillations—parts situated near the edge of the disk are alternately visible and invisible according to the period. However, the maps made of these limb regions show distortions that are due to perspective.)

Forty-one per cent of the Moon's surface is therefore invisible to observers on Earth. But in October 1959, Soviet scientists achieved the amazing feat of launching a space rocket which circled round the back of the Moon at close range and photographed its hidden face, transmitting pictures back to Earth by a television apparatus responding to terrestrial signals.

This performance, which opened up a new era in the history of astronomy, had been preceded by a no less extraordinary achievement: the launching a month earlier of the rocket Lunik II which landed on the Moon on September 13, 1959. The rocket disintegrated on touching the Moon's surface (it was travelling at a speed of about 7,500 miles per hour); but before it landed it was able to relay invaluable information back to Earth. It revealed that the Moon has no appreciable magnetic field and that it is not surrounded by radiation belts, like the Earth.

The second rocket—Lunik III—was launched on October 4, 1959, and, on October 7, it was able to take pictures of the greater part of the hidden side of the Moon and of a small limb area whose features are already known. When the automatic interplanetary station (as it is called) took the photographs, it was about 38,500 miles from the Moon's surface and nearly 300,000 miles from Earth.

All the command signals to the instruments on board were transmitted from the Earth. In this way, when the station approached the Moon, its orientation system—which included optical and gyroscopic sensing devices, as well as logical computers and guidance engines—was switched on causing the spontaneous rotation to cease and the station to turn into a position from which its cameras could photograph the Moon. The photographic operation lasted approximately 40 minutes. Processing and developing of the film were carried out automatically on board the station and the images, converted into electric signals, were relayed back to Earth by a radio system somewhat different from an ordinary TV transmitter.

Preliminary study of these pictures shows that the hidden face of the Moon is dominated by mountainous areas and that there are very few seas like those on the visible side. But crater seas are very conspicuous in the southern and equatorial areas.

The presence in these photos of part of the area already studied, has made it possible to connect known features with hitherto unknown ones on the hidden side of the Moon.

Among the features visible from Earth which were photographed by the AIS are a number of seas: the Humboldt Sea, the Sea of Crises, the Marginal (Border) Sea, Smyth's Sea, part of the Southern Sea and others.

These seas, situated at the very edge of the Moon as seen through our telescopes, appear to be long and narrow due to the distortion of perspective. The pictures taken by the interplanetary station, however, show only slight distortion, because the seas have been photographed some distance from the visible limb. A large part of the Southern Sea, for instance, on the reverse side of the Moon was found to have a coastline with a tortuous configuration.

In contrast, Smyth's Sea is more rounded and to the south is indented by a mountainous region. The Marginal (Border) Sea is elongated and Humboldt's Sea has a peculiar pear-like shape.

South-south-east of Humboldt's Sea, the photos showed a mountain range over 1,240 miles long (named by the Russians Soviet Mountains) which crosses the lunar equator.

(Continued on page 332)

Biomedical Problems of Space Travel

The idea of man as a traveller in space, an explorer of realms unknown and possibly even unguessed at, has long held the imagination of people the world over. It is a project with immense romantic appeal. Space scientists, however, who are working to bring about this seeming miracle, warn there are numerous obstacles of extreme difficulty that must be surmounted before manned space travel can be safely achieved.

Among the problems still to be solved are some that concern the biomedical aspects of space flight. Scientists are presently trying to find answers to questions such as these:

1. How can you predict accurately the effect of a change of gravity on the space traveller when it is impossible to check such a change any place but in outer space?

Zero gravity or weightlessness is an environmental factor of space travel which cannot be simulated for prolonged periods in experiments on earth. The only way scientists have been able to achieve the weightless effect of space is by airplane manoeuvres in a "parabolic" flight in which the acceleration of the plane balances the earth's gravitational pull. The longest this space-like state has been attained with man is one minute. Indications from these flights are that the blood pressure, respiratory rates and heart rates drop as the gravity is decreased.

It has been fairly well established that a man can withstand the effects of leaving the gravitational pull of the earth, to go into orbit, but it is impossible to determine what effect continued orbiting in a near weightless state will have, or what effect the return to the earth's gravitational pull will have.

2. How do you get physiological and psychological information about the space-man back to earth fast enough so that instruments can be operated automatically if he is unable to operate them himself?

One of the primary instrumentation problems in space travel is getting information about the individual back to earth in time to take action if something goes wrong. Equipment needed on the ground which will give an early indication of trouble, so that a switch can be made from manual to automatic controls if necessary. If this information can be received fast enough, it may be possible to save the

astronaut's life and get him back to earth safely.

3. Will the space traveller be able to withstand the psychological effects of loneliness, boredom, physical constraint and prolonged silence?

Professor William Bean, head of the Department of Internal Medicine at Iowa State University, believes that, although the person who goes into outer space must be physically fit, intelligent and well-trained, the overriding and limiting factors are those which deal with mental and temperamental attributes and capacities. "Claustrophobia, physical constraint, detachment, a confusion of reality in hallucinations, boredom, unaccustomed silence, loneliness, unused vision, hearing and perhaps smelling—these must all be brought under control lest the very unreality of the environment, leading to fatal mental aberrations or mounting and uncontrolled anxiety, cause the astronaut to destroy himself through inadvertence or pulling the 'panic button,'" concludes Professor Bean.

4. How do you assure pure air for him to breathe and how do you make the food which he needs palatable as well as nourishing?

The problem of assuring pure air is of primary importance for, if carbon dioxide is not removed from the space capsule, its concentration in the air will pass the limit of man's tolerance and finally cause the traveller's death. Although this problem seems to have been solved for short flights into outer space, it is still unsolved for longer flights. Sundry experiments with the aim of converting carbon dioxide produced by the body into oxygen for use by the space traveller are now under way. However, scientists believe it will be many years before this question can be satisfactorily answered. Much thought also is being given to food for a space traveller, and a range of specially prepared nutrient pastes, put up in tubes, are being tested.

5. How can you be sure that the space capsule is protected so the traveller can withstand any radiation which it might encounter?

There are intense and not fully explored radiation belts in the magnetic field surrounding the earth. Cosmic radiations include large streams of the nuclei of light and heavy atoms which can produce untoward biological effects. In December,

1958, Dr James A Van Allen discovered the existence of two great radiation belts encircling the earth. Orbiting earth satellites have since confirmed his discovery and defined some of the functioning of the so-called Van Allen belts. According to Dr. Frank D Drake of the US National Radio Astronomy Observatory, it is also possible that astronauts approaching the planet Jupiter may have to make their way through radiation belts 100 times more deadly than those surrounding the earth. Scientists foresee that experiments using living material of all types in satellites will be necessary, to provide extensive data on various biological effects, not only on immediate metabolism and function, but also on survival, longevity carcinogenesis and mutations.

In October, 1960, the US Air Force sent three mice—Sally, Amy and Moe—650 miles (1,040 kilometers) up into space. They travelled in the nose cone of an Atlas missile and a tiny radio transmitter on the back of one relayed data on its heartbeat, breathing and muscle activity back to receiving stations on the ground. Early results of examination made after their safe return indicate the mice stood up well under the strain and suffered less radiation effect than expected.

A month later, specimens of artificially-grown human tissues were carried into orbital flight in a capsule aboard the American earth satellite Discoverer XVII. After having been exposed to a gigantic solar flare for 50 hours, the capsule was recovered in mid-air by an Air Force plane. Scientists studying these specimens after recovery found the cells were not affected by the radiation they received and a sample portion was later reproducing normally.

These results have brought encouragement to the space scientists in their arduous, yet exciting, task.

Hazards of Radio-Active Materials

(Continued from page 329)

hazards, in case of any accidental release of radioactive substance.

Atomic energy will be increasingly used in future in all spheres with increase in the number of reactors and nuclear power stations. A stage has therefore come, when we can say that we are 'living with radio-activity'. It is, therefore, well worth knowing the atom and some of its potential hazards.

The Moon's Hidden Face

(Continued from page 330)

tor and extends into the Southern hemisphere.

A group of four medium-sized craters, the largest of which is about 45 miles wide, is situated near this mountain range, on the side of the Marginal (Border) Sea, while a big crater sea (the Moscow Sea), about 180 miles in breadth, is located to the north east. Its southern part ends in a bay, named the Bay of Astronauts. In the southern hemisphere is a large crater (Tsiolkovsky) over 60 miles wide with a central peak, and the Sea of Dreams on the edge of the visible area.

Russian specialists point out that the hidden side of the Moon was illuminated almost continually by the Sun while the photos were being taken. Consequently, formations on the surface do not produce shadows and some of the detail is "washed out".

The Soviet Academy of Sciences recently issued an atlas of the Moon's hidden face, containing 30 hitherto unpublished photographs taken by the space station (UNESCO)

ENTHUSIASM

I consider my ability to arouse enthusiasm among men the greatest asset I possess.

The way to develop the best that is in a man is by appreciation. There is nothing that so kills the ambitions of a man as criticism from his superiors. So I am anxious to praise but loath to find fault.

I have yet to find the man, however exalted his station, who did not do better work and put forth greater effort under a spirit of approval than under a spirit of criticism.—Charles Schwab

Enthusiasm is knowledge on fire. Once a great idea takes hold of a man, then he can be sure that enthusiasm will follow. The world will only catch fire from a man who believes.—John S. Coleman

Enthusiasm can transform the most dreary obligation into a crusade, and life should be a crusade.

No human being need say, "I am just an ordinary person doing an ordinary job." There are no ordinary people—and there are no ordinary jobs.

There is only one way things can be ordinary, and this is, if you think so.—

—Dr. Norman Vincent Peale

Teachings of

MAHATMA



GANDHI

Q. What Gandhiji meant by self-realization? What means did he prescribe for the realization of the ultimate end?

Ans. Self-realization means seeing God face to face, realizing Absolute Truth, attaining *moksha* or knowing oneself. The ultimate object of man's life, according to Gandhiji, is self-realization.

Gandhiji reconciles self-realization with service to society. Self-realization to him means realization of "the greatest good of all" "The greatest good of all", or, as he calls it in Gujarati, *Sarvodaya*, also includes political progress. Politics, however, is only a part of this aim. Gandhiji also insists that the best way to serve all is to serve one's own country, for one's countrymen are one's nearest neighbours.

He, however, rejects the utilitarian doctrine of "the greatest good of the greatest number" as the end of life. For "It means in its nakedness that in order to achieve the supposed good of 51 per cent the interests of 49 per cent may be, or rather, should be sacrificed. It is a heartless doctrine and has done harm to humanity. The only real, dignified, human doctrine is the greatest good of all, and this can only be achieved by uttermost self-sacrifices."

Self-realization, he says, requires self-purification. Self-purification requires an ethical discipline. According to Gandhiji, "... he who is not prepared to order his life in unquestioning obedience to the laws of morality cannot be said to be a man in the full sense of the word "

Q. What Gandhiji meant by "As the means so the end"? Give arguments in support of this quotation. What according to you are Good Means and Evil Means?

Ans. The problem of means is closely connected with the problem of ultimate end. Communists, Fascists as well as most practical politicians believe in the maxim, "the end justifies the means," i.e., if the end is desirable, even means like cunning, deceit and violence are justified, if they help us to achieve the end.

In Gandhian philosophy means and ends are convertible terms. The two are

inseparable and should be equally pure. That the end is high and laudable is not enough for him, the means too must be moral. In fact, the means are, to him, everything.

This emphasis on means is partly due to the fact that man can only strive, he cannot command results. We can control the means but not the end. Besides, the end grows out of the means. To quote Gandhiji, "As the means so the end." "The means may be likened to a seed, the end to a tree; and there is just the same inviolable connection between the means and the ends as there is between the seed and the tree." The Gita doctrine of *nishkama karma* (action without attachment) also teaches us that a good deed produces only a good result. So Gandhiji believes that "if one takes care of the means, the end will take care of itself."

Gandhiji's theory seems to be the only correct view of the relation between the end and the means. The opposite theory that the good end justifies all means, even violent means, is dangerous in practice and unsound ethically. The theory permits recourse to violence, fraud, untruth, opportunism, etc., provided the end is just. But these means, instead of helping us to advance on the path of progress, lead us to regard human beings as means rather than ends, deaden our finer feelings and result in oppression and cruelty.

Good means alone can lead us to lasting peace and progress. History as well as contemporary experience teach us that violence engenders violence, revenge leads to counter-revenge and a war sows the seeds of further wars.

If we believe in the ultimate aim stated above and the fundamental unity of life, good ends will mean, in the words of Aldous Huxley, "a state of greatest possible unification." This can be obviously achieved by intrinsically unifying, e.g., good means and not by separative or divisive, i.e., bad means. According to Tolstoy, "All that tend to unify mankind belong to the Good and Beautiful. All that tend to disunite are Evil and Ugly."



VOCABULARY TEST

(All the key words below end in -ic. This suffix—from the Latin *iculus*, Greek *ikos*, meaning "pertaining to"—is often used to form an adjective from a noun. Tick the word or phrase you believe to be nearest in meaning to each key word. Answers are also given below.)

1. **Erotic**—A: wandering. B: given to mistakes. C: difficult to understand. D: amorous.

2. **Exotic**—A: strange or foreign. B: temperamental. C: vain. D: clear.

3. **Soporific**—A: flattering. B: sickening. C: exciting. D: sleep-producing.

4. **Axiomatic**—A: placed in order. B: pivoting on a central point. C: self-evident. D: accurate.

5. **Aromatic**—A: crippled. B: fragrant. C: sentimental. D: evil-smelling.

6. **Archaic**—A: awkward. B: damaged. C: lame. D: belonging to an earlier period.

7. **Nostalgic**—A: indolent. B: diseased. C: homesick. D: soothing.

8. **Apathetic**—A: without emotion. B: extremely sympathetic. C: imitative. D: causing sorrow.

9. **Meteoric**—A: explosive. B: temporarily brilliant. C: disastrous. D: overwhelming.

10. **Sadistic**—A: smart. B: malicious. C: given to deriving pleasure from inflicting pain on others. D: depressed.

11. **Phlegmatic**—A: sluggish. B: ignorant. C: fat. D: having stiffened joints.

12. **Enigmatic**—A: displeased. B: puzzling. C: learned. D: short-sighted.

13. **Sporadic**—A: epidemic. B: whirling. C: occasional. D: stagnant.

14. **Egocentric**—A: retiring. B: self-centred. C: circular. D: enclosed.

15. **Ironic**—A: good-humoured. B: inflexible. C: hard in texture. D: disguisedly sarcastic.

16. **Acoustic**—A: pertaining to sound or hearing. B: jumbled. C: shrewd. D: keen.

17. **Prolific**—A: skilful. B: swift. C: fertile. D: wearisomely verbose.

18. **Choleric**—A: hot-tempered. B: feverish. C: pain-racked. D: yellow.

19. **Aesthetic**—A: austere. B: sensitive to beauty. C: effeminate. D: pertaining to morals.

20. **Epic**—A: given to severe judgments. B: lengthy. C: strong. D: heroic.

ANSWERS

1. **Erotic**—D: Amorous; arousing sexual desire; as, **erotic** literature.

2. **Exotic**—A: Strange or foreign; unusual; as, an **exotic** flower.

3. **Soporific**—D: Sleep-producing; tending to make lethargic; as, a **soporific** speech.

4. **Axiomatic**—C: Self-evident; needing no proof; as, an **axiomatic** rule of law.

5. **Aromatic**—B: Fragrant; spicy; having an agreeable smell.

6. **Archaic**—D: belonging to an earlier period; antiquated; as, **archaic** statuary.

7. **Nostalgic**—C: Homesick; yearning for a former place or time; as, "A penny-farthing race provided a **nostalgic** touch."

8. **Apathetic**—A: Without emotion or feeling; indifferent; as, an **apathetic** audience.

9. **Meteoric**—B: Temporarily brilliant; as, a **meteoric** career.

10. **Sadistic**—C: Given to deriving pleasure from inflicting pain on others.

11. **Phlegmatic**—A: Sluggish, impassive, stolid; as, a **phlegmatic** disposition.

12. **Enigmatic**—B: Puzzling; perplexing; mysterious; as, an **enigmatic** smile.

13. **Sporadic**—C: Occasional; as, **sporadic** machine-gun fire.

14. **Egocentric**—B: Self-centred; looking at everything with its relation to oneself in mind; as, an **egocentric** person.

15. **Ironic**—D: Disguisedly sarcastic; using words to mean the opposite of what they usually express; as, "The play ended with an **ironic** twist."

16. **Acoustic**—A: pertaining to sound or learning; as, the **acoustic** properties of a theatre.

17. **Prolific**—C: Fertile; producing abundantly; as, a **prolific** writer.

18. **Choleric**—A: Hot-tempered; fiery.

19. **Aesthetic**—B: Sensitive to beauty or to the fine arts; as, an **aesthetic** temperament.

20. **Epic**—D: Heroic; noble; as, a novel of **epic** grandeur.

STUDENTS EMPORIUM

NATIONAL DISCIPLINE SCHEME

It was in July 1954 that the National Discipline Scheme was introduced in Kasturba Niketan, New Delhi, by the Ministry of Rehabilitation under the guidance of General J. K. Bhonsle, then Union Deputy Minister for Rehabilitation.

It is common knowledge that ever since the dawn of Independence, there have been frequent manifestations of indiscipline in all strata of society, particularly among the student community. This was most marked in the refugee camps and colonies. Bulk of the displaced persons, after having lost all they possessed, reached India after partition in a state of utter poverty. Having gone through no end of sufferings, they were mentally unhinged, dissatisfied and frustrated. There was lot of unrest and indiscipline among them. To arrest any further deterioration in their morale, the National Discipline Scheme was started as an experimental measure in Kasturba Niketan, one of the refugee colonies in New Delhi. The object of the scheme was to improve the morale of the refugee children and to inculcate discipline among them so that they could be turned into useful citizens.

After the scheme had been in operation for a short while, the mental outlook of displaced persons changed considerably, and the scheme proved an unqualified success as was evidenced, not only from the marked improvement in the general conduct of the inmates of this camp, as also from the support, encouragement and praise it received from leaders in all walks of life who had occasion to witness the working of scheme. It was gradually extended to other refugee institutions in Delhi, Bombay, West Bengal, Punjab, Madhya Pradesh and (the then) Saurashtra. Upto 1957, no separate provision for this scheme in the 2nd Five-Year Plan was made and expenditure was met from funds placed at the disposal of the Ministry of Rehabilitation. It was soon realised that for nation building, discipline was equally necessary for non-displaced persons also. Consequently, the

Planning Commission in 1957, requested the Ministry of Education to include the scheme in the 2nd Five-Year Plan and to extend its operation to non-displaced institutions also.

The National Discipline Scheme aims at building such Indian citizens who would be the fore-runners of a great and true democracy that India is bound to be in the near future. It has, for its aims and objects, the eradication of indiscipline which constitutes a serious impediment not only to the progress of the country but also to its freedom.

It aims at making the younger generation healthy, both in mind and body and instil in them a sense of patriotism, self-reliance, tolerance and self-sacrifice. It inculcates amongst the children a spirit of nationalism and cultural unity and what is more, good citizenship. It is directed to bring out latent leadership aptitudes and talents in healthy, balanced children and to imbibe into them a sense of discipline, duty, patriotism and national pride. The resurgent spirit of the country's youth, which at the moment is frittered away, is sought to be channelised by the scheme in proper directions so as to accelerate the pace of progress in the country.

Home, undoubtedly, is the best place where discipline amongst children when their minds are most receptive, can be inculcated. But, unfortunately in India, the majority of parents are uneducated, living in abject poverty and squalor in congested areas lacking in basic civic amenities. Consequently, they have neither the time nor the aptitude to impart training in discipline to their children at home. The scheme, therefore, seeks to make up these deficiencies in the environments of the home to build up the children's character.

Broadly speaking, the training under the National Discipline Scheme embraces the following main aspects:

(a) **Physical Training:** The National Discipline Scheme aims at creating a healthy mind in a healthy body. It has been uni-

versally recognised that drill is the foundation of discipline and in consequence, Physical training is imparted through simple and easy manoeuvre drills, parades, sports and games. Physical training, not only serves to develop the physique of the children and promote good health, but also develops in them a spirit of camaraderie and leadership. It also promotes the co-ordination of the movements of children in a group and gives them a sense of precision.

(b) **Mental Training:** Mental training plays a very important role in the development of the children's character and personality. It helps in drawing out the best in them and assists in character building and moulding their general conduct and mental facilities on right lines to enable them to succeed in any career they choose. The children are also taught to appreciate a sense of duty to themselves, to the society and to their country.

All tendencies towards sectarian and sectional loyalties are discouraged and an attempt is made to create a pronounced bias in favour of nationalism. Attention is paid to a number of details of habits like cleanliness, dress, punctuality. Special care is taken to remind them of India's past glory, tradition, culture and heritage. In short, efforts are made at making the children conscious of their duties and ready to contribute their mite in building up the India of our dreams.

(c) **Administration:** The children are taught elementary principles of administration, without going into the technicalities. During the receptive period of their life, a climate for administration is created so as to provide them with a sound foundation for building up first rate administrators which this country needs very badly.

(d) **Organisation:** This aspect deals with impressing upon the young children the advantages of methodical, concentrated and corporate working. They are given practical training in organising meetings, parades, cultural programmes, sports and games and competitions. They are shown the grace and beauty that methodical working and planning lends to an occasion as against the confusion and chaos often seen. This training in organising things on smaller scale in the beginning may lead the children to organise greater things on a grand scale when they grow up.

(e) **Cultural Development:** This is in-

tended to awaken and develop interest in our younger generation in India's rich and ancient culture. Rhythm and grace of movement are also brought into the life of the children by teaching them folk dances. This creates a feeling of belonging to a composite culture of a country that is one and indivisible. The scheme also emphasises inter-state exchange of culture so that what is good for one part of the country may also become a matter of pride for the other. In this way, the unity of India's culture amidst its diversity is prominently brought out.

During the term of its experimental observation, the scheme not only produced encouraging changes and satisfactory results but also won acclaim and appreciation of a number of people from all walks of life including leaders and eminent personalities both national and international, who had the occasion to witness its working.

A great demand for the introduction of the N.D.S. is coming in from all over India but due to the availability of a limited number of instructors at present demand cannot be acceded to. However, by the end of the 2nd Five-Year Plan, over 1200 schools are expected to be taken over by the scheme.

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MOSCOW'S FRIENDSHIP UNIVERSITY

The Friendship University was officially opened in Moscow on November 17, 1960. The envoys of the youth from 59 countries of Africa, Asia and Latin America attended the opening ceremony. The initiative to set up the Friendship University in Moscow came from the Head of the Soviet Government N.S. Khrushchev.

Khrushchev's statement to set up the Friendship University in Moscow, made at the Gaji Mada University of Indonesia, became known to the whole world in a very short time. More than 43,000 applications were received for 500 seats, the number allotted for the first year. The most promising of the applicants from Asia, Africa and Latin America were invited to take part in the competitive examinations.

Addressing the meeting devoted to the opening of the Friendship University, N. S. Khrushchev said: "In setting up the Friendship University we have only one aim in view: to help other countries to train highly skilled cadres. This is particularly

important for countries which have been left behind in economic and cultural development, for countries which lack their own national cadres of specialists."

The University was set up as a public institution. Its leading body is the University Council composed of representatives of the sponsoring organisations, a representative of the Ministry of Higher and Specialised Secondary Education of the U.S.S.R., the Rectorate and the elected representatives from the teaching staff and the students. Participation in the activities of the Council provides in itself a schooling in democratic self-government for the students.

The University has six main departments and a preparatory department. The term at the main departments is four years, with five at the medical department. The departments were selected on the basis of a careful study of the proposals contained in the letters from the public abroad and in view of the requirements of the countries of Asia, Africa and Latin America.

The University trains specialists in the most diverse branches of science. The Engineering Department will train mechanical engineers, in the field of machine-building, mining engineers and civil engineers. This department is attended by representatives of all the countries from which the students have come.

The medical Department will train doctors and pharmacutists. Those dedicating their lives to physics, mathematics, chemistry and biology will attend the Physico-Mathematical and Natural Sciences Department. After their graduation they will be able to work at research establishments. Graduates of a number of departments will be able to work as teachers.

All students, irrespective of the department chosen by them, are studying at the Preparatory Department.

There are three sections at the Preparatory Department. At the one-year section, all students study Russian, for all instruction at the University will be in that language.

At the two and three-year sections students will be able to fill in the gap in their School education. Apart from Russian, the Preparatory Department will also teach physics and chemistry, mathematics and biology and some other general subjects.

A small group of Soviet students also attend the one-year section together with foreign students. They learn one of the three foreign languages: English, French or Spanish.

Tuition is free. The Soviet Government provided the University Polyclinic with the most up-to-date equipment. All students get medical aid free of charge. They do not pay anything for their hostel accommodations and are entitled to a scholarship. The University pays their travelling expenses. Taking into account the fact that the overwhelming majority of the students are from countries with hot climates, the University provides them with warm winter clothing.

The first months of the studies show that despite a busy programme students cope with it, in the main. Visual aids, and instructive slides, for example, are used on a wide scale.

Tape-recorded lessons and exercises play an important role in acquiring the correct pronunciation. But what matters most of all is the thirst for knowledge on the part of the students and extensive work carried out by teachers of the Russian language. All this has already yielded good results. Within the first eight weeks, the students learned to understand spoken Russian and now converse with Soviet citizens.

* * * CARE WITH THE COMMAS

The use of commas is to a certain extent a matter of personal judgment. The tendency nowadays is to omit them where they are not essential rather than to scatter them about lavishly.

The primary purpose of commas, as of all punctuation, is to make the sense clear. There is, for example, a difference in the meaning between: "The car, which ran into the wall, was damaged" (with commas), which suggests that only one car is under discussion and it ran into the wall and: "The car which ran into the wall was damaged" (without commas), implying that at least two cars were involved in the accident and one of them ran into the wall.

The other important purpose of comma is to indicate where pauses should be made in a sentence and so make reading easier. For instance, we should write: "I walked down the road with my sister and my friend," but: "I walked down the road with

my sister, and her friend came round the corner."

If the comma after "sister" were to be omitted from this last sentence, we should be in danger of reading straight on and temporarily missing both the meaning and the rhythm of the sentence.

The comma is used to separate a series of similar words in a sentence such as: "In his orchard he grows apples, pears, plums and cherries."

In a list of this kind, it is not necessary to include a comma before the final "and," although some people do put one in.

* * *

CLEAR SPEECH, CLEAR BRAIN

Somebody once said that you can judge a person's brain by the way he speaks. In other words, clear speech denotes clear thinking—and by "clear" we mean simple, direct, without hesitation.

This has nothing whatever to do with education—in fact, for some people high education produces clutter, pomposity, a desire to speak in anybody's language but their own.

Some people seem to go out of their way to use as many words as possible—particularly when writing. Official departments are often the worst offenders in this way. Sir Winston Churchill once had a memo submitted to him reading: "It is requested that you will make every endeavour to. . . ." He crossed it out and in its place put: "Please try to. . . ." Horrible jargon such as "I hereby beg to acknowledge yours of even date" should also be avoided.

Many people spoil their conversation by peppering their talk with such expressions as "you know," "I mean," "sort of", which can be very irritating for the listeners.

Practise expressing your ideas in simple, concise phrases which keep to the point, and you will acquire a reputation for intelligence and clear thinking. Cultivate the habit of "listening" to your own speech and you will learn to recognise from the rhythm and flow when a sentence is well constructed and pleasant to hear.

* * *

LIVE ONE DAY AT A TIME

You have probably noticed that if you get up one morning and something goes wrong—a minor annoyance perhaps—the whole day is often upset by similar irrita-

tions. There seems to be no obvious reason why these 'black' days occur, when everything and everybody appear to be working against us.

A possible explanation is that once we are disturbed by an annoying incident, we spend the rest of that day unwittingly looking for trouble. Naturally, we find it easily enough. We do not, perhaps, realise that so much depends upon our **attitude of mind**.

Fortunately, we are not all alike, or this world would be a very dull place. For example, a joke that will send one person into fits of laughter, will not raise a smile from another. What one person will accept as a kind action or remark will make another person feel insulted. We have all discovered this from experience.

To make life even more complicated, we ourselves are 'different people' on different days. It depends how we happen to feel on any particular occasion. Consequently if we wake up in an irritable mood, we become annoyed much easier than usual. Then everything seems to go wrong. Probably on the next day we feel that it is good to be alive. Then everything good appears to come our way. Why? Because we are in an attractive, optimistic mood. We expect things to go right and they do. Even the smallest good fortune is magnified in our mind and we respond favourably.

It is quite natural for us to experience these "good" days and "bad" ones. We can't expect to feel on top of the world all the time, but when we are on the downgrade we should always remember that this is only a temporary reverse. Tomorrow, or the next day will seem more hopeful, and we shall forge ahead with confidence.

The happiest people are those who take each day as it comes. They don't expect too much from life, they take the rough with the smooth. They accept everything philosophically.

When we learn to live one day at a time, taking all that comes, in our stride, we shall be happier, healthier and more successful. (From **PSYCHOLOGY**)

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GUIDE TO CAREERS: TYPESETTING MACHINE OPERATOR

Printing is not only an industry but also an art. Its contribution to educational

cultural, scientific and economic development of a nation is beyond measure. Unfortunately in India where less than 20 per cent of the people are literate this industry has not yet reached its peak. Nevertheless, there are about 25,000 printing presses in India, some small and some large. In printing, composing is the primary or basic occupation. In small presses this work is done with modern Linotype, Intertype, Monotype and Photosetting composing machines. Now-a-days, the bulk of printed text, including almost all the solid paragraphs in books and newspapers is set by machine. For speedy and accurate composition, a large number of printing presses are gradually installing these machines.

A Type Setting Machine Operator may be either a Monotype Operator or a Linotype Operator, or an Intertype Operator or a Photo Setting Operator. A Monotype Machine consists of two separate units, the keyboard and the caster. The manuscript to be composed is kept in a holder and a scale is set on the machine to the length of the lines to be printed. The operator then operates the keyboard machine which perforates a narrow roll of paper mounted at the top of the keyboard. The paper then automatically winds on another spool. While operating the keyboard which is similar to a typewriter he follows the manuscript rigidly. He is also required to make many minor adjustments in the machine before actually starting the operating work.

The Monotype Caster Operator sees that the spools perforated by the keyboard operator are used to produce the actual type.

A Linotype machine has a keyboard of about 90 keys of letters and other characters. An Operator clips a manuscript or a typed copy of the material to the machine and types the material. When he completes a line he presses a lever and the machine casts the whole line of types. Other duties performed by a Linotype Operator include removal of types from the machine, putting new ingots (blocks) of the type metal into the melting pot and doing minor adjustments. Occasionally he may be required to draw proof of galley types and send them to the proof reader for correction.

A Photo Setting Operator or an Intertype Operator sets types with the aid of photography on a type setting machine,

called the Linofilm, the Intertype Foto Setter, the Rotofoto, the Monophoto etc. He operates a machine similar in character to a Linotype machine which is popularly known as a slug casting machine or a line composing machine. These machines are operated more or less in similar ways and their performances are also similar though there are minor differences in operation.

Type Setting Machine Operators generally work in noisy conditions where a number of people work on different machines.

TO QUALIFY as a Type Setting Machine Operator one normally has to acquire skill on the job. There are regular apprenticeship schemes to train these operators in a few Government of India Presses. A majority of workers in this occupation begin as learners in private presses. There is no standardised qualification for this training but normally young boys with some education, preferably O. Matriculation standard, join private presses as helpers, inkers or distributors and learn the job while working with skilled workers. Experience in hand-composing is an asset to learners. In most of the private presses regular training facilities are not available and as such learners are supposed to learn the work at their own initiative. In consequence it takes an unusually long period to get trained as Monotype Linotype, Intertype or Photo Setting Machine Operators in private presses. In order to meet the requirements of trained technical personnel the Government of India have instituted apprenticeship schemes for the training of learners in various types of work, including Monotype Linotype, Intertype and Photo Setting operation in the Presses at Aligarh, Calcutta, New Delhi, and Simla. The period of training is 4 years and the Mono and Lino Operators specialise in their occupations in the 4th year. For training of these operators only Matriculates between the ages of 15 and 18 years are taken. The trainees receive a consolidated stipend of Rs. 25/-, Rs. 30/-, Rs. 35/- and Rs. 40/- p.m. during the first, second, third and fourth year respectively. There is no fixed quota of the number of trainees to be taken but the number in no case will exceed 1/10th of the sanctioned strength of the category of workers. Recruitment of apprentices is made through advertisement and local selection. At the end of the period

training the Operators are subjected to a test and successful candidates are awarded Trade Test Certificates.

FURTHER TRAINING is usually by practical experience on the job but with a view to improve the training and the skill of printing workers, the Government of India have started four regional schools of training at Allahabad, Bombay, Calcutta and Madras. These schools provide two types of specialised courses of Linotype Operators and Monotype Operators:

(i) A Licentiate in Printing Technology: There are two courses for this Diploma; the part-time course for 5 years and the full-time course for 4 years. In these courses candidates with a pass in S.S.L.C. or its equivalent examination, below 19 years of age are admitted. Age may be relaxed for Intermediates and Graduates; and

(ii) All India Certificate courses in Printing and Allied Technology: The part-time course is of three years duration whereas the full-time course is of 2 years duration. Non-Matriculates who can understand lectures in English are admitted to these courses. Government of India have also decided to set up a Central Institute of Printing for conducting research in the Printing industry.

THE COSTS of training vary from institution to institution but the tuition fees for the Diploma courses and All India Certificate courses are about Rs. 120/- and Rs. 36/- per year respectively. Besides tuition fees trainees are required to pay fees for sports, visual education, magazines etc. and a Caution Deposit at rates prescribed by the Head of the Institution. Hostel facilities are available in some places. The Government of India, various State Governments and some charitable institutions offer scholarships to a number of deserving students.

PERSONAL QUALITIES necessary for the job are good health, normal eyesight, finger dexterity, artistic taste, patience, powers of concentration and very good spelling.

Type Setting Operators work in printing firms where a number of workers work on various other machines. They are also required to work in shifts doing night or afternoon shifts. Linotype Operators working near hot lead have to work cautiously to avoid accident. Some eye-strain is in-

ferred as an asset to an Operator. An Operator has to type, pick up and adjust types. All these require dexterity of hands, especially of fingers. Speed, accuracy and neatness are essential qualities for any Operator. Artistic ability and understanding of layout are additional but useful qualifications. Operators with some command over the language can eliminate simple spelling and grammatical mistakes.

ENTRY into the profession is mostly as apprentices or learners. Vacancies are either advertised in newspapers or notified to Employment Exchanges. Vacancies of apprentices to the Government of India Presses are invariably advertised. Regular vacancies however are notified to Employment Exchanges. Openings exist in Government of India Presses, State Government Presses, Newspapers and leading dailies, private presses owned by Universities and Trusts, Printing and Publishing houses and some Job Presses.

EMPLOYMENT OUTLOOK: Due to recent important restrictions on foreign printing machines, modernization of printing presses has been slowed down. Nevertheless, with the spread of education in the country the printing industry will steadily develop on modern lines. In the Printing Industry, which already employs about 5,00,000 people, Type Setting Machine Operators form the second largest group in the composing room, the first being the group of hand-compositors. Whatever may be the development it can be safely said that all those who successfully complete their courses from the training schools during the next few years will be able to find employment.

FOR FURTHER INFORMATION on training etc. of Type Setting Machine Operators contacts may be made with:

- (1) Any Government of India Press.
- (2) State Government Presses.
- (3) The All India Federation of Master Printers, 42, Broadway, Madras.
- (4) The Calcutta Association of Master Printers.
- (5) The Delhi Printers' Association, 9/4, Asaf Ali Road, New Delhi.
- (6) The Regional Schools of Printing at Allahabad, Bombay, Calcutta and Madras.
- (7) Employment Exchanges.

EDUCATIONAL FORUM

OUR EDUCATIONAL PROGRESS

By 1966, a primary school would be provided within easy walking distance from the home of every child in this country. This was stated by the Union Education Minister, Dr. K. L. Shrimali, while addressing the Central Advisory Board of Education meeting in New Delhi on January 16, 1961.

At the conclusion of the Third Plan the number of primary schools is expected to increase to 4 lakhs, and the enrolment of students in the age group 6 to 11 would go up to 5 crores.

In technical education, there has been a four fold increase in the last 12 years. During the Third Plan the admission capacity at the degree level is proposed to be increased to 20,000 students and at the diploma stage to 40,000.

Government, Dr. Shrimali said, has decided to launch during the Third Plan a scheme of correspondence courses and evening colleges to enable students to learn while earning.

It is also proposed to offer 1,500 scholarships every year during the Third Plan for students of outstanding merit at the school leaving, intermediate and B.A. stages.

The Prime Minister, who also addressed the Board, asked for co-relation between education and the goal of the country which was a socialistic pattern of society. He said the old conception of an acquisitive society was out of date. Socialisation was an inevitable trend all over the world and there was even more of it in some of the capitalist countries than in India. Shri Nehru said it was absurd to think of socialism without equality of opportunity which was most important in the field of education.

CURB ON COLLEGE ENTRY

Dr. N. K. Sidhanta, Vice-Chancellor of Delhi University, suggested that admissions to universities should be restricted to keep teaching standards at a high level.

In his convocation address to the Calcutta University on Jan. 28, 1961, Dr. Sidhanta said all educationists were agitat-

ed over this question. But mere restriction of admission would not solve the problem. The State would then have to keep occupied the teenagers who are left out. If the university refused to keep a student engaged, he would be left on the streets, ripe for any mischief latent in the city. Diploma or certificate courses with academic subjects would therefore have to be opened to those who failed to secure admission to degree courses.

Referring to the craving for college education and the employers' insistence on educational certificates, Dr. Sidhanta said the universities in this country had been established to produce junior civil servants and clerks. The State had failed to give a clear lead on the matter. It still insisted on a university degree for most of its office-posts and the commercial houses followed suit.

In the near future, therefore, they could not hope for any appreciable fall in university admissions. In order to avoid chaotic conditions—particularly in Calcutta city—the State would have to make arrangements to keep students engaged in some academic activity. Dr. Sidhanta said.

HIGHER EDUCATION ONLY FOR WORTHY

Acharya Jugal Kishore has expressed his conviction that higher education should be given only to deserving and promising students.

The U.P. State Education Minister who was speaking at a reception at Chirgaon, 18 miles from Jhansi on Feb. 4, 1961, remarked that university education should not be considered as a means of whiling away time.

He referred to the frustration among youngmen and said it was due to the fact that education imparted to them had no definite aim. This not only aggravated the problem of unemployment but the uncertainty about their future bred indiscipline.

Mr. Jugal Kishore emphasised that the education system needed overhaul. It should be fashioned in such a way that it

would help the all-round development of the personality of the student. It should also be capable of producing self-supporting and useful citizens, he added.

The Minister said every student, after finishing secondary education, should be provided with facilities for vocational training so that he could go in for an independent career and not hanker after jobs.

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RECOMMENDATIONS OF PUNJABI UNIVERSITY COMMISSION

The Punjabi University Commission has recommended that the proposed Punjabi University should be a multi-faculty university, located at Patiala and named after that city.

It has recommended that English should be the medium of instruction for the time being in this university but changed over to Punjabi within five years at least in the teaching of arts subjects.

In the making of various university authorities, like senate and syndicate, elections should be avoided.

Releasing the report of the Commission at a news conference in Chandigarh on Feb. 27, 1961, the Chief Minister, Mr. Pratap Singh Kairon, said that the Government was keen to set up a Punjabi University shortly. Only through Punjabi could the large masses of the area be educated in higher studies.

Mr. Kairon also indicated that the Sanskrit University at Kurukshetra would gradually be converted into a multi-faculty Hindi university.

The 13-man Commission was appointed on August 5, 1960 to examine and propose, among other things, the scope and functions of the university and to examine and propose the steps necessary for the development of the Punjabi language and literature on scientific lines, including its development as a medium of instruction for university education.

The Maharaja of Patiala presided over the Commission, the report of which was unanimous.

The Commission has recommended that though the chief objective of the Punjabi University would be the advancement of Punjabi studies and the development of the Punjabi language, it could be a multi-faculty university providing instructions in humanistic as well as scientific subjects.

Measures should be adopted by the university to develop the Punjabi language and replenish its stock of technical literature to enable it to finally replace English as the medium of instruction in all branches of learning.

Hindi and English should be compulsory subjects up to the graduate level for all students. Arrangements should also be made for advanced and specialised post-graduate studies in these languages.

The Commission has recommended that all colleges situated in Patiala should be constituent units of the university. By a separate notification, the State Government might testify the limits of the jurisdiction beyond Patiala city.

The university, according to the Commission, will require Rs. 1.52 crores as capital investment and an annual revenue expenditure of Rs. 18 lakhs.

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NATIONAL REGISTER OF SANSKRIT PUNDITS

One hundred and thirty five persons have so far submitted requests for inclusion of their names in the National Register of Sanskrit Pundits. These requests will be considered by the Central Sanskrit Board at its meeting to be held in April this year.

The Central Sanskrit Board had approved the following criteria for selection of Pundits for inclusion in the National Register:—

(i) The Pundit should be reputed as an expert in at least one Shastra; (ii) he should have taught a Shastra or Shastras successfully for at least 15 years; and (iii) he should have literary or research work of significance to his credit.

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REQUESTS FOR NEW UNIVERSITIES

Dr. K. L. Shrimali stated in the Rajya Sabha on Feb. 21 that six requests had been received by the University Grants Commission in 1960 for the establishment of new universities.

Statewise, two requests each had come from Rajasthan and Bihar and one each from Andhra Pradesh and Madras.

Five of these requests were acceded to, said the Minister. In the case of the proposed Agricultural Universities at Rajendra-

nagar and Udaipur, the Commission had, however, advised that the Universities should have three major faculties.

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BENEFIT SCHEME FOR SCHOOL TEACHERS

Dr. K. L. Shrimali, Union Minister of Education stated in the Lok Sabha on Feb 22 that the Government of India had recommended to the State Governments the adoption of the Triple Benefit Scheme for teachers introduced by the Government of Madras.

The Minister said the scheme includes provision for pension, provident fund and insurance and applies to all teachers including those in aided schools. He added that the question of extending the Scheme to teachers in the Union territories was being examined.

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ESTABLISHMENT OF ENGINEERING COLLEGES

Dr. Humayun Kabir, Union Minister of Scientific Research and Cultural Affairs, stated in the Lok Sabha on Feb. 22 that in addition to the eight engineering colleges sanctioned during the Second Plan, seven more were proposed to be established during the Third Plan period, thus covering all the States.

The Minister said that each college would have an admission capacity of 250 students per year for Degree courses in Engineering and Technology. Tentatively, the estimated cost of each college was Rs. 148 lakhs including buildings, equipment, staff quarters and hostels.

Dr. Kabir said that the State Governments of Uttar Pradesh, Maharashtra and Madhya Pradesh proposed to set up one engineering college each under the State's Third Five Year Plans. The West Bengal Government proposed to establish two engineering colleges under the State's Third Plan. The Government of Bihar had already set up an engineering college at Bhagalpur under the State's Third Five Year Plan, added Dr. Kabir.

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INEXPENSIVE BOOKS IN HINDI

The Union Ministry of Education have launched a scheme for the preparation, translation and publication of books on

diverse subjects for the common reader in Hindi.

The scheme envisages the publication of popular books on selected subjects to provide inexpensive and useful reading material.

The scheme has been specially launched to fill the lacuna in fields hitherto neglected and will be implemented as part of a phased programme. Initially, the Union Ministry of Education propose to sponsor the publication of books on science, technology and social sciences. Over twentyfive titles in the science series have been selected for translation and publication.

Besides enriching Hindi, the scheme will enable the Union Ministry to popularise the technical terms evolved by it. In the publication of these books, the Directives contained in the President's Order of April 27, 1960, will be strictly adhered to and the International Forms of Numerals will be used wherever numbers are required to be printed.

Under the scheme the selected publishers will procure the copyright of the titles the translation of which is entrusted with them and get the books translated through competent persons who would be expected to use the Hindi technical terms evolved by the Union Government.

The specimen translations and the translated manuscripts of the books would be examined by the Union Ministry of Education with the assistance of an expert or a panel of experts. Thereafter, the approved books would be brought out by publishers under the general guidance of the Union Government.

The number of copies of books to be printed in the first edition will not be less than 3000, of which the Union Government will purchase not more than one-third. The Government of India will invite tenders from publishers of standing for the translation and publication of over 25 books in the science series to begin with.

The prescribed form of tender and the terms and conditions governing the work and the specifications, along with other particulars, can be had from the Director, Central Hindi Directorate, Union Ministry of Education, 15/16, Faiz Bazar, Darya Ganj, Delhi.

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

COLOMBO PLAN

The Colombo Plan has started the twelfth year of a 21-nation co-operative effort to raise the living standards of some 700 million people in South and South-East Asia one quarter of the world's population.

The Plan was launched on January 9, 1950, by a conference of British Commonwealth Ministers held in the Ceylonese capital. Its aim was to provide a clearing house for Western aid from outside the region and a forum for exchange of information on speeding development within the area.

The Plan's original life was set at five years, but its successes have prompted two extensions and it is now due to run until 1965.

The Colombo Plan has been described as a major weapon in the Free World's constant effort to demonstrate that economic progress can be achieved more readily and more effectively in free society than under Communism.

With giant neighbour China periodically claiming new economic successes, this task often appears overwhelming but the twenty-one nations continue to tackle it with fervour because on the outcome can depend the vital future allegiance of the millions in the uncommitted countries.

The twenty-one nations work together in a unique development organization. The Colombo Plan has neither an integrated economic aid programme nor multilateral control over development scheme. All grants, loans and technical aid plans are arranged bilaterally. The very looseness and informality of the organization has contributed to its success. It has given needy countries help without in any way interfering with their internal sovereignty and without raising suspicion that the aid they get is politically motivated.

The Plan members are divided into recipient nations and donor countries. The fifteen countries receiving aid are Burma,

Cambodia, Ceylon, India, Indonesia, Laos, Malaya, Nepal, North Borneo, Pakistan, the Philippines, Sarawak, Singapore, Thailand and Vietnam. The six donors are the United States, Britain, Canada, Japan, Australia and New Zealand.

Each recipient country prepares its own development plans according to its individual needs and desires, taking into account the advice and experience of others. The plans are then presented to the group of donor countries and sponsors are found to meet the cost with aid.

Since the Plan was launched eleven years ago, some seven billion dollars have been poured into the tasks of creating basic industries, providing irrigation, raising far yields, building roads, providing power and training technicians. Of this figure, some six billion was given by the United States alone.

Much has been achieved but in its second decade the Colombo Plan is still facing big problems. Food production has increased, per capita income has risen, death rates are down and life expectancy is greater. But this region, which already encompasses 25 per cent of the world's population in little more than 6 per cent of the earth's land area, is expected to have a population nearing one billion by 1975. Food output and employment opportunities must be boosted massively if these millions are to be fed. This is a giant task, one which is likely to bring yet another extension of the Colombo Plan in 1965.

INDIA HAD WORLD'S FIRST AIR-MAIL

The World's first airmail was flown in India 50 years ago on February 18, 1911, by the French Pilot, Monsieur Henri Pequet. As part of the commemoration ceremony, the pioneering Allahabad/Naini airmail flight was re-enacted on February 18 this year.

Special flight covers, designed by Air-India and defaced with special cachet were flown on the Jubilee flight. The Indian

Posts and Telegraphs Department have also issued three commemorative postage stamps, one of which features Air-India's Boeing 707—Inter-continental Jet. The designs show the special Postmark as well as the Aircraft used in 1911.

The celebrations marked the Golden Jubilee of an epochal event in Indian Postal history. At 5.30 p.m. on February 18, 1911, a Humber bi-plane, piloted by Monsieur Henri Pequet, flew from Allahabad Exhibition grounds to Naini, over the waters of the Jamuna, a distance of about six miles. The plane carried a bag of some 6,500 letters and cards, weighing less than an ounce each, flying no higher than a thousand feet. It took 13 minutes for the outward flight and 17 minutes for the return. It was a record in those days.

To commemorate the inaugural flight the Indian Posts and Telegraph Department had struck a special Postmark at the Postal Workshops, Aligarh, with which all articles were impressed in majenta ink. The design of the special Postmark was in the centre of two circles with an aeroplane flying over mountains in the centre and an inscription reading, "First Aerial Post U.P. Exhibition, Allahabad" between the circles. The year 1911 appears just below the mountains.

By a happy coincidence the beginnings of commercial aviation in India is parallel to that of the United States. Charles Lindberg's dramatic New York/Paris solo flight in 1927 opened the door to modern air transport in the new world. Three years later, on the other side of the world, J.R.D. Tata's spectacular solo flight from England to India gave a fillip to commercial aviation in India.

Again, three years after the "Lindberg Line" was opened in the U.S.A., Tata Airlines inaugurated the first scheduled air-mail service in India on October 15, 1932.

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NIKITA KHRUSHCHEV THE MOST TRANSLATED AUTHOR DURING 1959

Nikita S. Khrushchev has now topped Vladimir I. Lenin in the number of translations of his works and speeches published during 1959, most of them into the various languages of the Soviet Union. Specifically, the number of translations was 198 against 174 for Lenin, who has headed the list in previous years. Both are immediately followed by a book of which there

was no single author—The Bible—which was translated 171 times during 1959.

Two great Russian writers follow, Tolstoy and Dostoevsky with 130 and 114 translations respectively, and sandwiched in between them, with 124 translations, that master writer of science fiction for the young, Jules Verne. Then comes Agatha Christie, the specialist in mystery stories who, with 103 books translated during 1959, beat her nearest rival Georges Simenon.

These figures are listed in the latest (twelfth) edition of the **Index Translationum** published annually by Unesco. A total of 29,661 translations are recorded, nearly all of which appeared in 1959, and are grouped by countries of publication, 67 altogether.

A statistical table published at the end of the Index permits comparisons by subject and by country. It shows, for example, that as in the past, literature and especially works of fiction are translated far more often than any others—16,213 translations or nearly 60% of the total. Law, Social Sciences, and Education come next, more numerous this time than History, Geography and Biography; then follow Applied Sciences, Religion and Theology. Works on Philology and Linguistics are, as usual, at the bottom of the list.

Among the countries, the U.S.S.R. remains in first place with a total of 5,254 translations into all the languages of the Union. Germany is next with 2,068 books translated, followed by France in third place. Then come Czechoslovakia, with translations into both Czech and Slovak, Belgium, Italy, the Netherlands, Spain, Japan, the United States, and Sweden. In all of these countries the number of translations was over 1000.

After the authors previously mentioned, translations of whose works passed the 100 figure, come: Shakespeare (90); Simenon (74); Hans Andersen and Karl Marx (69); Chekhov and Balzac (68); Pearl Buck (67), and A. J. Cronin (60).

Topping the 50 mark, there follow in order: Zola, Pasternak (a newcomer in this bracket), Somerset Maugham, Erle Stanley Gardner, Turgenev, Graham Greene (another newcomer in this class), Jack London, Dickens and Pushkin.

(UNESCO)

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THE "CHARTER OF FLOWERS"

Measures to preserve and develop India's floral wealth were announced by the Central Government on Dec. 10, 1960, involving the improvement of different types of indigenous flowers and the extensive import of foreign flowers (largely bulbous) for growing in India. Under this scheme, described by the Indian Press as a "charter of flowers," different parts of India will specialize in the development of indigenous flowers of all types ranging from marigolds to roses; e.g. the development of orchids is assigned to Darjeeling; of lotuses and water lilies to Calcutta; of roses to Delhi and Saharanpur; of chrysanthemums to Coimbatore and Saharanpur; of cannas to Poona; of marigolds and bougainvilleas to Hyderabad; and of begonias to Bangalore.

Side by side with the improvement of Indian flowers, a number of foreign flowers will be imported and bred in different parts of the country; for this purpose a centre will be set up at Srinagar, with sub-centres at Simla and Darjeeling. The flowers to be imported will include dahlias and roses from Holland and daffodils and narcissi from Britain.

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2ND BLAST FURNACE OF DURGAPUR PLANT COMMISSIONED

The second blast furnace of the Durgapur Steel Plant was recently commissioned by the Union Minister for Steel, Mines and Fuel, Sardar Swaran Singh. This furnace will produce 1.270 metric tons of iron daily.

The first furnace of the Plant was inaugurated by President Rajendra Prasad in December, 1959. The production of this furnace during the last few months has exceeded the rated capacity of 1,270 metric tons daily.

The Durgapur Steel Works, with its three blast furnaces, eight steel-making open hearth furnaces and re-rolling mills to produce 7.9 lakh tons of finished steel products, is scheduled to be completed by the end of this year. Already two coke oven batteries, one blast furnace, three open hearth furnaces and the blooming and billet mills have been operating. The plant when fully commissioned will produce one million tons of ingot steel per year.

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WHO DISCOVERED NEW WORLD FIRST?

Was John Cabot, credited with much of the early discovery of the New World in 1497, merely a Johnny-come-lately trying to get in on the act?

Mr. T. E. Layng, chief of the map division of Canada's public archives says, after 12 years' research, that he was. In fact, he was beaten to the sighting of Greenland by a full year.

Mr. Layng says the real hero-explorer was an obscure farmer-seafarer, Juan Fernandes from the Azores.

"Fernandes, in company with an Azores landowner-adventurer, Pedro de Barcelos, sighted Greenland in 1496 while exploring under the banner of King Henry of Portugal.

"And Cabot, the Bristol seadog widely credited with re-discovering the old Norse route to the Americas, was simply following in Fernandes's wake when he sighted Greenland in 1497."

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VISITORS TO INDIA IN 1960

Last year 26,349 foreigners were granted visas for entry into India. Of these 13,970 were tourists, 2,906 businessmen and 1,769 students.

Most of the foreigners came from America; and they numbered 11,197. Other nationalities were: Afghans 740; Frenchmen 1,464; Germans 2,400; Indonesians 1,452; Italians 1,068; Iranians 527; Portuguese 437; Russians 759; Siwss 561; and Thai 534.

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FOREIGN LOANS TO INDIA

India has received about Rs. 2,727 crores of foreign assistance (Rs. 2,091 crores as loans and the rest as grants) since the commencement of the First Plan in 1951, of which Rs. 1,617 crores are meant to be utilised for the Second Five Year Plan.

By March-end, 1960, however, marking the completion of four years of the Second Plan, only Rs. 691 crores were utilised, leaving a balance of Rs. 925 crores, both in terms of loans and grants.

The total assistance (Rs. 2,727 crores) includes the aid so far given by various countries and agencies for the Third Plan.

The following are the loans received by India country-wise, with the amounts of grants shown in brackets: United States—

Rs. 974.64 crores (Rs. 505.68 crores); U.S.S.R.—Rs. 383.41 crores (Rs. 115 lakhs); United Kingdom—Rs. 162.66 crores (Rs. 47 lakhs); Canada—Rs. 15.71 crores (Rs. 90.57 lakhs); Australia (Rs. 12.27 crores as grants); New Zealand—(Rs. 343 lakhs grants); West Germany—Rs. 150.58 crores (Rs. 2.09 crores); Japan—Rs. 27.61 crores; Czechoslovakia—Rs. 23.10 crores; Rumania—Rs. 5.23 crores; Yugoslavia—Rs. 19.05 crores; Norway (Rs. 2.19 crores grants); Poland—Rs. 14.30 crores; World Bank—Rs. 219.44 crores for the public sector and Rs. 95.84 crores for the private sector; Ford Foundation—(Rs. 14.20 crores grants); and the United Nations Special Fund—(Rs. 4.16 crores grants).

The loans aggregate to Rs. 2091 crores and the grants to Rs. 636.21 crores.

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FOREIGNERS RESIDING IN INDIA

There were 61,044 registered foreigners residing in India on Nov. 1, 1960. On Dec. 1, 1959 their number was 55,653.

These figures do not include children below 16, nationals of Commonwealth countries and foreign diplomats and officials who are not subject to registration.

Amongst the residents registered were: Tibetan—16,833; Chinese—12,460; Afghan—6,920; American—4,688; Iranian—4,079; German—3,434; Burmese—1,685; Russian—1,623; Italian—1,161; Portuguese—1,157; and French—982.

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INDIA'S FOREIGN TRADE DURING 1960

India's imports during 1960 exceeded the Rs. 1,000 crore mark, according to official figures.

The figure for the year was Rs. 1,000.40 crores, as against Rs. 939.87 crores during 1959.

There was an increase of nearly Rs. 15 crores in exports during the year, the figure for 1960 being Rs. 635.69 crores, including Rs. 12.24 crores of re-exports, as against Rs. 620.48 crores including Rs. 6.94 crores of re-exports during 1959.

The result is an increase of Rs. 45.32 crores in the country's adverse balance of trade, which now stand at Rs. 364.71 crores.

* * *

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Readers' VIEWS

LITERATURE MIRRORS LIFE

Sir,

The term "literature" baffles a correct definition but for generalisations' sake, any person when recording his experiences and experiments with life is said to be creating literature. So literature is what life reveals or in other words, it is a reflection of life. Writers might have subjects to write upon which may vary from clod to cloud, but every touch to depict these all contains a vision of life. Literary works which stand the test of time to become classical contain in them most colourful delineations of life. Psychologically it is the lust to know the values and queer ways of life which inspires the writer to give genuine generalisation to his approach to life. Poets have idealised life in pigments while describing it in their poems. They have gloriously and magnificently coloured it with their intellectual versatilities.

In terms of romanticism, romantic writers have enhanced the beauty of literature by way of providing microscopic and multi-coloured touches to life. They have created pen-portraits of life which have indelible and everlasting impression on our minds. They, in short, reveal the miseries and misfortunes, toils and turmoils of life in contrast with the glories and grandeurs of it, in the most moving manner. Their accounts run into very fine and appealing tones. As the very life is ever inspiring for them, so are their writings for the readers.

Didactic element in literature apply corresponds to life. Writers, imparting noble pieces of advice in their illustrations in the form of stories, ballads, novels and dramas, want everybody to draw morals for the right channelisation of life towards a happy and healthy goal of enlightenment. For them life is something dark and to make it bright they have inserted didactic element in their writings.

However, life is not a simple object for the writers to write about. Their reactions, experiences and experiments are

variable. The description of life by them depends upon their intellectual set up.

So in the welter of discussion it may be added that it is the 'life' which is critically examined by every critic in his own way and is put in his own terms. It is 'life' which is the pith and point of literature. Life is the frame work around which every literary pattern is woven. So it is the life which creates literature and later on it is the literature that creates life. In short, literature visualises and idealises 'life'—Literature, quantitatively as well as qualitatively, is a substantiation of the fact that literature mirrors life. Further more it reflects magnified image of life. For example, Harriet Beacher Stowe in his 'Uncle Tom's Cabin's writing has proved such attitude to slavery and this has led him to an exposition of barbarities of slavery in the most dramatic and colourful way. Keen and conscious observations of life make literature remarkable not for a day but for all ages.

Ludhiana,
21-2-61.

Yours faithfully,
Kushwant Bajaj.

'QUESTION BOX'

Sir,

In the February issue of your magazine, you have answered the question: "Why and how a particle will never come back to earth if thrown with a velocity of 7 miles per sec.?" Your answer is limited to "Why" of the question. It is right that it has been "calculated" that 7 m.p.s. is the initial velocity of a particle which enables the particle to clear the field where the force of gravity exists. But "How" of the question remains unanswered. For the benefit of those who are interested in this, I am here showing that how the velocity is 7 m.p.s., in the case referred above.

Let the mass of the body be 'm', which is to be projected, and M be the mass of the earth.

Force acting on the body at a distance x from the earth $= GmM/x^2$

(Newton's law of gravitation

Work done by bullet against Gravitation."

field when it moves through a small distance dx
 $= GmM \cdot dx/x^2$.

Total work done in escaping

$$= \int_R^{\infty} \frac{GmM}{x^2} dx = \left[\frac{GmM}{x} \right]_R^{\infty} = GmM/R$$

(retain the positive sign, for work done is always positive)

Now if the initial velocity be 'v' its kinetic energy in the beginning is $\frac{1}{2}mv^2$.

\therefore This must be the work done in escape.

hence, $\frac{1}{2}mv^2 = GmM/R$ or $v^2 = 2MG/R$

But $M = 53.47 \times 10^{26}$ gms, $G = 6.7 \times 10^{-8}$ c.g.s.
 $R = 6 \times 10^8$ cms.

Substituting these values we get,

$$v = \sqrt{\frac{2 \times 53.47 \times 10^{26} \times 6.7 \times 10^{-8}}{6 \times 10^8}}$$

$$= 11.19 \times 10^5 \text{ cm/sec or } 6.958 \text{ miles/sec.}$$

Hence if the body be projected with this velocity it will just reach that point where the force of gravity ceases to act. Hence to escape it i.e., to never come back to earth velocity should be a bit more i.e. 7 m.p.s.

Ludhiana,
 15-2-61.

Yours faithfully,
 Vinod Shashi Varma.

(Our answer is not intended for physicists or mathematicians exclusively, instead it is meant for every layman. Your calculations are, of course, all right, but for a simpler procedure you can proceed as follows:

It is known that outside the surface of the earth, the acceleration due to gravity varies inversely as the square of the distance from the centre.

Let the acceleration at a distance x be k/x^2 .

When $x=a$, we know that acceleration due to gravity is g , so that

$$k/a^2 = g, \text{ i.e., } k = a^2 g.$$

Therefore the equation of motion of the particle is $v \cdot dv/dx = -a^2 g/x^2$.

Integrating, we get

$$\frac{1}{2}v^2 = a^2 g/x + \text{constant.}$$

But, $v=0$, when $x=\infty$, hence, constant=0.

$$\therefore v^2 = 2a^2 g/x.$$

Therefore, velocity of the particle when on the surface of the earth is given by putting $x=a$ in the above expression; doing so we get,

$$v^2 = 2a^2 g/a \quad \text{or } v = \sqrt{2ag}$$

But $a = 4600 \times 1761 \times 3$, $g = 32$,

Substituting these values, get

$$v = 1640 \sqrt{330} = 7 \text{ miles per sec nearly.}$$

—Ed. C & C.)

* * *

SYMBOL OF AFRICAN RESURGENCE

Sir,

The brutal murder of Patrice Lumumba, Congo's first Prime Minister, and his two others associates, has shocked the conscience of the whole world. The undying courage and patriotic spirit with which he faced the untold oppression and torture perpetrated upon him on more than one occasion by the agents of Belgian colonialists, were exemplary. They killed him along with his two friends, perhaps, in the hope that the men who would be left behind might die out. But the calculations of these butchers were wrong, as never in the history of freedom movement liberation struggles had been suppressed by repression. The Colonialists' conspiracies in Congo might be able to prolong the crisis, but they would not be able to continue indefinitely with their despicable ventures.

Congo must be freed from these brutalities. One Lumumba might die, but the spirit of this immortal patriot would ever keep the lamp of freedom burning on the soil of Congo eternally providing inspiration to those living sons of the soil to rise against injustice and intolerance.

Lumumba was the symbol of African resurgence. Lumumba is dead, Long live Lumumba!

Kharagpur,

7th March, 1961.

Yours faithfully,

Lala Baikuntha Lall.

* * *

PLANNING AND PROGRESS

Sir,

Though two Five-Year Plans have been implemented and the Third one is on the anvil, the lot of an ordinary man has not ameliorated. He is still bearing the harsh yoke of dire poverty. His problems have become more acute than they were a decade ago. The Government has failed to liquidate poverty and unemployment.

The greatest failure of our planning is on the food front. The shortage of food-grains has caused a drain on our national income. We have to spend something like one thousand crores of rupees per year.

Planning aims at the gradual attainment of higher standard of living for our masses. But the fact is that there has been no substantial rise in the standard of living of our masses. There are two important factors that are responsible for it. In the first place, it is the general level of prices that has been and is continuously soaring. Secondly, the taxation policy of the Government is fundamentally wrong because its ultimate pressure falls upon the rank and file that are steeped in poverty. So far as capitalists are concerned, they have so many devices at their disposal. They employ them. Their employment results in the enhancement of their profits and the exploitation of masses.

Thansi,
25-2-61.

Yours faithfully,
Hamidul Hasan.

EQUAL PARTNERS OF THE SOCIETY

Sir,

Many new vistas of recruitments, promotions and transfers etc. have been provisioned in the administration for the other castes and tribes in India. Some are good, some are irksome and some are even bitterly antagonistic to the core.

Instances are not rare in which they (the other castes and tribes) are promoted two grades higher, superseding hundreds of their senior experienced staff. Although in the interest of harmony of Hindu community in India the upliftment in the economic standard of the down-trodden people is welcome, but there are genuine grievances of the opposite side if the principle of merit is thrown to the wind in posts where competition can alone bring the desired results. A feeling has been running high among the great bulk of the people that the existing privileges are not meant to uplift them, but to make favours to them and create a schism in the same community. From many points of view it is indeed agreeable to protect the "have-nots" in the initial stage of recruitment for a certain specific period, but favouritism in higher posts is bringing down efficiency in the administration and also creating a sense of frustration in the minds of the eligible neglected staff.

The way to obviate antagonism that is highly brewing among the staff is mainly rested with these castes and tribes themselves. Consciousness should grow among them that they are no longer of the low

castes or tribes but equal partners in the community. They should voluntarily abjure the undue favouritisms shown to them as the principle underlying the privileges lies not in creating a favourite class, but to make them equal partners of the society Bhadrak,
5-3-61.

Yours faithfully,
Radha Benode Mukherjee

A THOUGHT TO GANDHI

Sir,

Modern progress of science and technology has given man greater mechanical mastery and control over nature. But this achievement, in reality, has been proved as the greatest misfortune, which has turned the man into wild beast dedicating the whole of his life to the accumulation or craving for wealth.

Gandhiji put quite new solution to all these problems of humanity. He showed us the most effective way of life. His greatest quality was that he produced a synthesis of all the conflicting political ideologies and put before us the consolidated form of the ideas and proved the practicability of what he preached.

Moral and spiritual means which were considered and are still considered as taboo in politics, were practised and made crystal clear by Gandhiji. Moral means in politics can produce better results and open the way for self-realization.

He secularised religion and spiritualized politics. His experiments and precepts regarding truth and non-violence were unique. He proved how the application of pacifist doctrine could be extended from domestic policy and individual life to the life of the States.

The greatest contribution which Gandhiji made is, that where all the destructive weapons of warfare had proved unsuccessful in settling the disputes among nations, only the moral means such as negotiation and arbitration could bring harmony between them.

Gandhian principles emphasized on the importance of individual society and according to Gandhiji each individual should try to develop his personality without caring for the society as a whole because if each individual is improved, the society will automatically be improved.

Gandhiji sought to humanize man and thus made him divine. The Gandhian way

of using moral means to achieve the grand moral purpose of 'vasudhaiv Kutambkam' may bring life to mankind, which has been the ultimate aim of all the sages and seers of all the time of the world, for which they were born, lived and died. Gandhiji was one of them.

Kanpur,
3-3-61.

Yours faithfully,
Kuldar Singh.

NECESSITY OF ENGLISH

Sir,

In a frenzy of nationalism let us not forget the importance of English. Why we should deliberately refuse to learn a language which gives us a passport to travel in many parts of the world? Besides, even if we are staunch nationalist we must frankly admit that the past glory, ancient culture, inspirations and achievements of India can be interpreted to the world not through Hindi or other Indian languages but through English only.

It is rather obvious that English has become an International language. The cause of International peace would be promoted by such an international language, cannot be over emphasised. Galsworthy in an address remarked "The peace of the world and the march of true civilization are intimately wrapped up with the exchange of international thought and the establishment of a single inter-communicating speech common to the educated in all countries."

Indian students go to British and American Universities in large numbers with a poor knowledge of English; how can they either make a good impression or even get on with their studies satisfactorily? How can they take advantage of their stay abroad and win friends for India, unless they speak and write English fluently.

There should be no conflict, in fact, between English and other Indian languages. Every Indian ought to know the language of his province as well as the English language.

22-2-1961.

Yours faithfully,
Kapoor Chand Jain

A REAL GUIDE

Sir, I keep my eyes fixed on your magazine 'Careers And Courses' and I cannot help imagining that am wandering in

such a kingdom where wisdom serves as the king; knowledge, thought and idea act together as the Council of Ministers, and aspiration that fires the ambition works as the Commander-in-Chief of the Army.

Of all, the most attractive and heart-embracing articles in your periodical are those that deal with the questions of how to increase your memory, of how to increase knowledge, of what makes one feel tired, of how to concentrate the mind etc.; and always provide me with a lease of life.

(B. R. Konwar, Assam)

A FRIEND OF ALL

Sir, I wish to congratulate you for giving us to read such a good magazine as "Careers And Courses" which contains so many informative articles. It is indispensable to every one, be it a student of arts, science or technology. It is for this reason that it is very popular in all the universities of India. We watch eagerly for every issue.

(H. R. Prabhakar, Banaras)

CORRIGENDUM

Sir,

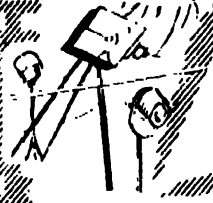
I draw your attention towards the mistake that has crept in in the March Publication of your "Careers And Courses". In G.K. Test (page 253), the question 3(b) under the heading "What are the old names of the following?" the 5th part of the said question is 'India's Flagship Mysore' and the answer given for that is "Dufferin". I think that the answer should be "H.M.S. Nigeria" and not "Dufferin". Kindly confirm.

(D. J. Dahuja, Jamnagar)

(Yes, you are right. The mistake is regretted—Ed. C. &C)

Whatever may have been the case in years gone by, the true use for the imaginative faculty of modern times is to give ultimate vivification to facts, to science, and to common lives endowing them with the glows and glories and final illustriousness which belong to every real thing, and to real things only. Without that ultimate vivification—which the poet or other artist alone can give—reality would seem incomplete, and science, democracy and life itself finally in vain.—Walt Whitman

FILM WORLD



ROW OVER AN ITALIAN FILM

No film has ever caused more uproar than **La Rolce Vita—The Sweet Life**.

The film is based on recent scandals in Rome, some of which involved people in high places.

Efforts were made to stop it being filmed. And when it did appear, it was condemned, by the Vatican and attacked on all sides.

A political row rocked Italy—still recovering from the effects of the scandal of Wilma Montesi, the girl whose body was found dumped on a lonely beach. It was rumoured she had died at a drug party given by some influential socialities.

Statesmen criticized the film as presenting Italy in an unpleasant light. Left-wing politicians used it as ready-made ammunition.

There were riots in cinemas. Director Frederico Fellini was spat upon and assaulted, his clothes ripped.

But all the time, the queues to see the film grow longer.

* * *

NEW YORK FILM CRITICS' AWARD

Two ties—for "best English-language picture" and "best director"—resulted in the twenty-sixth annual poll of New York Film Critics. United Artists' "The Apartment" and Twentieth Century-Fox's "Sons and Lovers" and their respective directors, Billy Wilder and Jack Cardiff, shared honours in those categories.

In the "best writing" category, "The Apartment" won, on the last ballot, over "Sons and Lovers." The original script was by Wilder and I.A.L. Diamond.

Previously, the only tied decision was in 1955, with France's "Diabolique" and Italy's "Umberto D" splitting honours as "best foreign film."

This year, the 16 film critics of eight daily metropolitan newspapers cited the French-Japanese co-production, "Hiroshima, Mon Amour" as the "best foreign-language film." Satyajit Roy's "Apu Sansar" was the runner up.

* * *

GUINDY INSTITUTE OF FILM TECHNOLOGY

The functioning of the Institute of Film Technology at Guindy figured prominently during question time in the Madras Legislative Assembly on January 24, 1961.

The Finance Minister, Mr. C. Subramaniam, said that diplomat courses in cinematography, sound engineering and film processing were offered in the Institute, which was started on September 15 1960. A sum of Rs. 38,000 has been provided in the budget for 1960-61 for the expenditure on staff, furniture, scholarships and stipends. The ultimate cost would be Rs. 6.4 lakhs, which included lands, buildings, equipment and so on. The annual recurring cost would amount to Rs. 35,300.

The Minister said the Institute was under the control of the Director of Technical Education. Examinations were conducted by the Board of Examinations and diplomas awarded to the successful candidates by the State Board of Technical Education and Training.

The Minister said the syllabus for the course had since been revised to include practical training also. He said the course was for three years.

* * *

WORLD FILM FESTIVAL IN INDIA

Details of the International Film Festival to be held in India in the winter of 1961 were given in the Lok Sabha by the Parliamentary Secretary to the Ministry of Information and Broadcasting, Mr. Anand Chandra Joshi.

The Parliamentary Secretary said that the object of the festival was to provide a forum for the participating countries to present films of artistic and cultural value and high technical standard and contribute to the development of motion picture art and technique.

The festival would be held in New Delhi from October 27 to November 2; in Calcutta from November 1 to 7; in Madras from November 6 to 12 and in Bombay from November 11 to 17.

The festival would be non-competitive. Souvenirs would be presented in respect

of films accepted for participation in the festival through official delegations, he said.

Only films produced or released on or after January 1, 1960 and 35-mm. wide would be eligible for entry. Films in languages other than English or an Indian language must have sub-titles in English or Hindi. Films entered in the festival should not have been shown in India prior to the festival. But there was no bar to the entry of a film shown at a festival in any other country.

Each participating country would be entitled to send a maximum of two films in each of feature and shorts categories, Mr. Joshi said.

* * *

INDIAN FILM FESTIVAL IN S.E. ASIA

The Indian Film Festival in South-East Asia will be held in Djakarta and Bangkok.

The idea for the festival was urged at a meeting of the Export Promotion Council in New Delhi. Three venues were proposed, namely Djakarta, Singapore and Kuala Lumpur but two have now been chosen. The festivals are scheduled in April, 1961.

The Government has asked the Film Federation of India to suggest about a dozen films suitable for exhibition at the festivals, as well as name of artistes (preferably those featuring in the films selected) and business men to be sent to attend the Festival.

The Government is understood to have taken the responsibility for arranging the exhibition of films, local publicity, hospitality, transport of film prints to and from and the provision of local language commentary for the festival films. It has also offered to contribute to the travelling expenditure of the delegates.

* * *

FILM ON GANDHIJI

Work on the production of a feature film on the life of Mahatma Gandhi was progressing, the Parliamentary Secretary to the Minister for Information and Broadcasting, Mr. Nand Chandra Joshi, told the Lok Sabha on Feb. 20.

Mr. Joshi said the film was expected to be completed towards the end of 1963.

The film was being produced under the supervision of the Gandhi Smarak Nidhi.

* * *

FILM PRODUCTION DURING 1960

Three-hundred and twenty features—an all-time high—were produced in our country last year.

According to figures available with the Indian Motion Picture Producers Association, Madras produced 144 films (these include 45 dubbed version), Bombay 133 and Calcutta 43. The corresponding figures for 1959 were 136, 122 and 45.

The ascendancy in total production gained by Madras in 1959 is thus maintained. However, in its main field of Tamil films, Madras has registered a small drop (63 compared to 76 in 1959).

Similarly, in Bombay in the main field of Hindi films there is a minute drop (109 and 111 being the figures for 1960 and 1959).

The largest number of films continued to be made in Hindi. The number was 120 (compared to 116 in the preceding year). Hindi production in Madras rose from 5 in 1959 to nine last year.

Calcutta's output of 43 films represents a small decline of 2 from the figure for 1959.

Bombay's total of 133 represents an increase over the 1959 figure of 122. There was a marked spurt in Marathi production, 15 compared to the preceding year's nine. Bombay's full breakdown language-wise is given below (figures in brackets indicate 1959 production): Hindi: 109 (111); Marathi: 15 (9); Gujarati: 2 (0); Punjabi: 4 (1); English: 1 (1); Sindhi: 1 (0); Tamil: 1 (0).

* * *

INFLUENCE OF CINEMA ON YOUTHS

Teen-agers contributed 28.2 per cent of all consumer spending at the cinema in 1959. This is shown in a survey by Mark Abrams, Research Director of The London Press Exchange, in which he defines teen-agers as "those young people who have reached the age of fifteen but are not yet twenty-five years of age and are unmarried."

Totalling five million, he shows that after meeting State and family obligations and putting aside about £70 millions as true savings, they spend £830 millions

(slightly over five per cent of the national total consumer expenditure).

Meanwhile, the headmaster of a co-educational school writing in the February "Family Doctor," British Medical Association magazine, blames the influence of the entertainment world's exploitation of "Romantic Love" for many of the thousands of "grievous mistakes" made every year by people getting married.

He says girls are maturing earlier and, therefore, want sex experience earlier because the amount of suggestion and propaganda, through "romantic" entertainment and advertisements, has increased perhaps ten-fold in the past 25 years.

The headmaster points out that "in the past boys and girls were to some extent protected, prevented from 'going too far,' by the fact that the girl's body did not make urgent demands and a 'decent boy' did not try to arouse her. I would say that these are the conditions we ought still to aim for."

STATE-OWNED STUDIO IN ORISSA

The foundation-stone of the State's film studio, Orissa Film Studio Limited, was laid on Republic Day by the Chief Minister, Dr. Harekrushna Mahtab, amidst the blowing of conchs and chanting of hymns by Brahmins who performed the ceremonial "havan."

Addressing the gathering after the ceremony, Dr. Mahtab expressed the hope that, with the establishment of the studio, production of films by producers of Orissa would become easy and the trade would make steady progress. He said that, with the active supervision of the Government in the venture, the studio would succeed if producers extended their whole-hearted co-operation.

Situated at the foot of the historic caves of Khandagiri and close to the proposed site of Silpapuri, the studio will occupy an area of twenty acres when completed. The "shooting" of films on the floor of this studio is scheduled to begin from August 15, 1961.

FILM ADVISORY COMMITTEE

The Government of India has reconstituted the Central and Regional Film Advisory Committees.

The reconstituted Central Committee consists of following members:

Mr. Mehboob Khan (Bombay). Mr. Ajit Bose, Mr. Bikash Roy (Calcutta), Mr. A. L. Srinivasan, Mr. P. Pulliah (Madras) and B. Nagi Reddi (Film Federation of India, Bombay).

The Bombay Regional Committee has the following members:

Mr. V. Shanta Ram, Mr. G. P. Sippy, Mr. P. R. Chopra, Mr. Chandulal J. Shah and Mr. Deep Khosla.

VARITIES TO HAVE FILM CLUBS

The University Grants Commission has decided that all universities in India should have film clubs.

The Commission has authorized payment of Rs. 7,500 to each university seeking assistance.

Twenty universities are likely to take advantage of this offer.

The University Film Council will need Rs. 1.5 lakhs to buy copies of films and cinematographic equipment.

The Commission has made it clear that no part of the assistance should be used for the production of films. Each club will have to pay a specified amount to the university Film Council for procuring equipment. In addition to contributions from the clubs, the Council will receive assistance from the Commission so that its work is not handicapped.

For men that read much and work little are as bells, which do sound to call others, and they themselves never enter into a church.—**Thomas North**

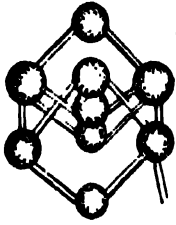
What songs the Sirens sang, or what name Achilles assumed when he hid himself among the women, though puzzling questions, are not beyond all conjecture.

—**Sir Thomas Brown**

I keep six honest serving men
(They taught me all I know):
Their names are What and Why and
When
And How and Where and Who.

—**Kipling**

If you pick up a starving dog and make him prosperous, he will not bite you. That is the principal difference between a dog and a man.—**Mark Twain**



SCIENCE

& INVENTION

SOVIET VENUS-BOUND ROCKET

The most advanced achievement to date in space research occurred on Feb. 12, 1961, when the Soviet Union successfully launched a space rocket—described as an “automatic interplanetary station”—in the direction of the planet Venus. The Tass Agency stated that all equipment was functioning normally, that the space rocket was moving on a trajectory “close to that calculated,” and that it was expected to reach “the area of the planet Venus” by the second half of May. The following details were given of the launching and of the objects of the experiment:

(1) A heavy artificial earth satellite (the weight was not disclosed) had been launched by an improved multi-stage rocket, and “a guided space rocket, launched from the sputnik, set an automatic interplanetary station on a flight to Venus.”

(2) The main objects of the experiment were: “to check the methods of injecting a space into a planetary trajectory; to check radio communications over super-long distance and the guiding of a space station; to check more exactly the size of the solar system; and to carry out a programme of physical observations in outer space.”

(3) The “interplanetary station” weighed 643.5 kilograms (about 1,420 lb.), carried a pennant bearing the coat-of-arms of the U.S.S.R., and was transmitting radio messages to earth on command signals.

With the exception of the moon, Venus is the nearest celestial body to Earth, from which it is 26,000,000 miles at its closest approach and 160,000,000 miles at its most distant (Mars is never nearer than about 34,000,000 miles). Owing to the deep permanent cloud-over which envelops the entire planet, nothing is known about physical conditions on Venus. As its atmosphere consists very largely of carbon dioxide, with very little oxygen, it is believed that life cannot exist on the planet, although the existence of primitive organisms has been postulated. Whereas some astronomers believe that the Venusian surface is

a barren desert swept by violent dust-storms, others think it possible that lush tropical vegetation may flourish beneath the steamy cloud-cover. Venus is slightly smaller than the Earth, with a diameter of 7,700 miles compared with the Earth's equatorial diameter of nearly 8,000 miles.

At the time of the Tass announcement the space rocket was nearly 80,000 miles from Earth; 24 hours later it was about 293,000 miles distant and, according to a further official announcement, travelling “with great precision” on its pre-determined trajectory towards Venus. It was stated that the rocket was powered by solar batteries and chemical sources of energy; carried apparatus for research into cosmic rays, magnetic fields, etc.; and was relaying telemetric information to Earth on command signals.

On Feb. 18, however, Tass admitted that the rocket would miss Venus by about 112,000 miles “without trajectorial corrections”; it was stated that Soviet scientists were still in contact with the space ship, which was then about 1,500,000 miles from the earth.

The Soviet Venus probe will approach that planet on May 19 or 20, **Pravda** reported on Feb. 1961.

At that time the station will be less than 100,000 kilometres from Venus, 70 million kilometres from the earth and 109 million kilometres from the sun and will have covered by that time 270 million kilometres.

The automatic interplanetary station, as reported by **Pravda**, will penetrate deeply into the sphere of attraction of Venus. Within this sphere it will move in relation to Venus over a near-hyperbolic course with the focus in the centre of Venus.

Early in April the probe will start moving in the firmament over a straight course. This straight movement among the stars will continue until the station approaches Venus which will occur in the vicinity of the star Epsilon Pisces.

At that time Venus will also be in the section of straight motion.

* * *

THE "SPACE CHIMPANZEE"

As part of the Project Mercury series of experiments (designed eventually to put a man into space), a specially-trained chimpanzee, "Mr. Ham," was fired to a height of 155 miles at Cape Canaveral on Jan. 31, 1961. Because the rocket developed greater thrust than expected, "Mr. Ham" landed 420 miles out in the Atlantic, instead of 290 miles as intended, and travelled at a speed of 5,000 m.p.h. instead of 4,000 m.p.h. After floating about in a capsule for three hours he was picked up from the sea unharmed by a U.S. destroyer and brought ashore, suffering only from a slight graze on the nose. Though at first a little "wobbly," he recovered quickly, chattered and grimaced at journalists and press photographers, and was described after medical examination as "happy and healthy."

"Mr. Ham" wore a pressurized space suit and travelled in a fibre-glass cabin, the controls and coloured lights of which he had been taught to manipulate. Though subjected to conditions of weightlessness, and to force of gravity 16 times the weight of his own body during re-entry, he manipulated all instruments perfectly during his adventurous flight up to the moment the rocket hit the ocean.

* * *

"MAN-IN-SPACE" PREPARATIONS

A space capsule of the type to be used in the man-in-space project was successfully launched and recovered on Feb. 21. Fired from Cape Canaveral by an Atlas rocket, it reached a height of 115 miles, a speed of 12,850 m.p.h., and was recovered 43 minutes later after a 1,425-mile journey down the Atlantic rocket range. A Project Mercury spokesman said the capsule was specially designed to withstand extremes of wind, heat, air pressure, and "aerodynamic buffeting" more severe than would be encountered in normal space flight, and has been recovered in good condition.

Immediately after this experiment it was announced that three astronauts had been chosen from whom one would be selected to make the first man-in-space flight. They were: Lieut-Colonel John Glenn (39), of the Marines; Captain Virgil

Grissom (34), of the Air Force; and Commander Alan Shepard (37), of the Navy.

* * *

SATELLITES IN ORBIT

Twenty-two U.S. satellites are currently in orbit and 13 of these are sending back scientific information to earth.

This was reported by the National Aeronautics and Space Administration (NASA) on Feb. 28, 1961 in its first "Satellite Situation Report". The report, formerly compiled by the Defence Department, lists all objects—whether satellites or rocket casings—now in orbit as well as "decayed" objects that have burnt up on reentering the earth's atmosphere.

In the three years of the space age, U.S. space probes and satellites total 39. The Soviet total is 11 including the Venus probe of Feb. 12, 1961.

* * *

CHEMICALS CAN CAUSE HEREDITARY CHANGES

Strong evidence has been reported that hereditary changes can be caused by chemicals, perhaps those in food and in the air. The findings, reported at a meeting of the Biophysical Society at St. Louis (Missouri, U.S.A.), support long-held theories that radiation alone cannot account for all man's hereditary changes and evolutionary processes.

The new evidence shows that chemicals such as benzopyrene (found in cigarette smoke), acridine (in coal tar) and caffeine (in coffee) can alter the structure of genetic material and thus change genetic patterns.

* * *

DWARFS CAN GROW TALLER

Studies conducted at Jersey City (USA) show that some dwarfs can be made to grow inches taller by being injected with growth hormone, which drastically changes their body chemistry.

Researchers at the Seton Hall College of medicine injected the hormone—extracted from human pituitary glands—into dwarfs whose own glands could not produce enough for normal growth. Some grew two or three inches and gained several pounds, the researchers report.

* * *

WORLD GEOPHYSICAL CALENDAR

During the International Geophysical year in 1957-58, scientists all over the world collaborated in gathering information about

the earth, by carrying out experiments and making observations thousands of miles apart, the results of which were afterwards compared and evaluated.

So fruitful has this co-operation proved that an International Geophysical Calendar has now been drawn up in which certain days and periods during each year are designated for the carrying out of geophysical experiments and observations. Three consecutive days in the middle of each month are set aside for the study of solar phenomena and meteor showers as well as activities related particularly to atmospheric geophysics, including research on aspects of cosmic rays, meteorology, air-glow, the ionosphere, geomagnetism, etc. In addition, ten-day periods known as Regular World Intervals are selected in each quarter year at the times of the equinox and solstice during which data is gathered on phenomena such as ionospheric drift and high atmosphere wind measurement. A further ten-day period in each quarter is devoted to observation of meteorological phenomena which often occur about a month after the equinoxes and solstices, and also for meteorological rocket experiments and balloon-sounding, programmes.

Obviously only those dates which can be planned long in advance or reliably predicted, as in the case of eclipses and meteor showers, are shown in the Calendar. For more unexpected phenomena, such as magnetic, auroral and ionospheric disturbance, where world-wide observations are also of great value, warnings are given by telegram or radio broadcast from regional warning centres in Japan, the U.S.S.R., Federal Germany, the Netherlands, France and the United States. Messages are also given out daily by the World Meteorological Organization's telecommunications network. (UNESCO)

DRUG FOR MASS BRAINWASHING

A Swedish doctor, Dr Holger Hyden of Goteberg University, informed a doctors' conference at San Francisco on January 29, 1961 that he was carrying out experiments on the effects of a drug capable of brainwashing the whole population of a country in a few days or even a few hours.

Speaking on mind control at the conference being held by California University, he said experiments indicated that the drug could change the mental pro-

cesses of a whole community even before the people realized it.

He said the drug was called tricyano-amino-propene. It was cheap to produce and could be introduced into the drinking water supply of a country, lowering the mental resistance of its inhabitants and making them more open to suggestion.

NEW FACTS ABOUT THE UNIVERSE

British scientists claimed on Feb. 10, that they had discovered new facts showing that the universe had a definite beginning.

Evening newspapers splashed the history under such headings as "The Bible Was Right."

But 42-year-old Professor Martm Syle, who headed the team of six Cambridge scientists, told a press conference that though there was a definite beginning the theories did not fit in with the "Biblical idea."

The four conclusions reached by the six scientists, one of them a woman, from the Mullard Radio Observatory of Cambridge were:

The universe is expanding.

All matter in the universe, of which the earth is only a very small part, is rushing out into space at fantastic speed. Thus a hole in the middle was being left behind.

There was a definite beginning. (One evening newspaper began the story by quoting the opening sentence of the Bible "In the beginning God created the heaven and the earth.")

The universe will not last for ever.

The six scientists claim that the universe is expanding and that the current "steady state" theory is wrong.

The "steady state" theory holds that there is constant creation of new stars in space from hydrogen atoms.

The six scientists based their claims on years of studying the other frontiers of the universe with a giant radio telescope penetrating beyond the realm of light.

They said that they now believed the alternative theory that thousands of years ago all the galaxies of the universe were compressed into a very much smaller volume, that an explosion took place and that since then the parts of the universe had been flying apart.

An originator of the "steady state"

theory is Professor Fred Hoyle, Professor of Astronomy at Cambridge: who was at the press conference. He did not accept that his theory should now be discarded.

Since it was first realised that far-distant parts of the universe are receding at very high speeds, philosophers and scientists have been trying to build an acceptable picture of the universe and its origins.

In 1948 three Cambridge astronomers, Bondi, Gold and Hoyle, proposed a picture which avoided the necessity for a single moment of creation and which did not involve large changes in the universe-pompts which philosophers have been loath to accept.

According to this theory, the universe is everlasting, with no beginning and no end, matter is being continuously created everywhere and continually condensing to form new galaxies to replace those which speed out of sight.

The team has concluded that the universe will not last for ever, although it has existed for 10,000 million years; it is changing with time.

Asked how long he would expect the world to last, he said: "I do not think it will concern us in our time.

"It will be tens of thousands of million years."

He told the press conference: "We have reached the conclusion that the universe is changing. The next step is to say how it is changing, but I do not think there will be any special need for new more powerful telescopes."

ORIGIN OF LIFE

Reading a paper on hydrogen atom at the session of the Indian Science Congress at Roorkee on January 3, 1961, the eminent Harvard astronomer, Prof. H. Shapley said that though billions of planets were suitable for sustaining life and where probably life existed, none of them except the earth was in the solar system.

The Professor said although he had doubts there could be a low form of plant life on the Mars, but the Venus, though in the liquid water belt, had a surface temperature of 500 degrees Fahrenheit and the Jupiter and the Saturn were too cold and the Mercury was too close to the Sun. In these planets, therefore, it was not possible for any life to exist.

The Professor listed six pre-conditions for the existence of life. They were availability of water in the liquid state; non-poisonous land, sea and air for protoplasms; a constant source of energy (the star); approximately circular orbit of planet; and, the most important of all, the process of life somehow to get started.

Discussing cosmic evolution as it touched the material universe the Professor described the complex process of the change from the inanimate to the animate—the protoplasmic organisms. This transition from the inanimate to the animate was marked by a "fascinating gap," a missing link.

Speaking of natural evolution Professor Shapley said the first serious effort to study the origin of life was made in Russia and Britain in the early twenties. But it was the Americans who resumed the study after World War II and achieved sensational results in 1955.

He went on to show how the four gases—ammonia, methane, water vapour and hydrogen, which formed the earth's atmosphere millions of years ago—were synthesised into amino acids. These amino acids were what the proteins were made of and this discovery was a great stride in closing the "gap."

* * *

ROCKET TO GO INTO THE EARTH

Soviet scientists have begun work on a "geological rocket" which will go downwards into space, a Russian geologist, Mr. Dmitiy Nalivkin, told the annual meeting of the Soviet Academy of Sciences at Moscow on Feb. 4, 1961.

Mr. Nalivkin said: "At present we are mastering space, but we do not know what is happening below our feet at a depth of 10 to 20 kilometres."

"We have already begun tackling this task," he said. "The first steps have been made and the direction of the experiment outlined."

Such a rocket would require special metals and special equipment weighing hundreds of tons, Mr. Nalivkin said.

Another important task was to determine the exact age of the earth, at present estimated between 3,000 million and 6,000 million years. With the help of geochemical methods it will soon be possible to fix a much more precise age, he said.



MR. G. B. PANT

Mr. Govind Ballabh Pant, Union Home Minister, died on Tuesday, March 7, 1961, a fortnight after he was stricken by an attack of cerebral thrombosis.

Mr. Pant was born of poor parents in Almora district on September 10, 1887. He taught fellow students to pay for his education and graduated from Muir Central College, Allahabad, in 1907. He stood first in the LL.B. examination and won the coveted Lumsden gold medal in 1909. Enrolled as an advocate of the Allahabad High Court that year, he practised law at Almora for some time and then settled down at Nainital, where he soon rose to be the leader of the bar.

With growing professional prestige came opportunities for political expression. Seven years later, in 1916, he started the Kumaon Parishad and was elected to the All-India Congress Committee.

The Parishad studied local problems and redressed local grievances. One of its major achievements was the abolition of the system of forced labour in the Kumaon Division.

Mr. Pant gave evidence before the Southborough Committee on behalf of the Parishad and successfully campaigned for the removal of Kumaon from the category of backward areas and the application of the Montford reforms to that region. It was great victory because the British had tried to keep the freedom-loving clan of Kumaon under surveillance for diplomatic reasons.

Mr. Pant's election to the A.-I.C.C. brought him in contact with Mr. Motilal Nehru on the eve of the formation of the Swaraj Party in 1923. The same year, he was elected to the U.P. Legislative Council on the Swaraj Party ticket. He had been Chairman of the Naini Tal District Board for some time.

It was Mr. Motilal Nehru who discovered the talent of Mr. Pant. After his break with Mahatma Gandhi on the issue of Council entry, he recommended that the Naini Tal lawyer should be made leader

of the Opposition. Mr. Pant held this position for seven years, until his resignation in response to a mandate of the Congress.

In 1927, he was elected President of the U.P. Congress and presided over its Allgarh session, which finalised plans for an agitation against the Simon Commission in the United Provinces.

He took part in the agitation in Lucknow, and received lathi blows in the company of Mr. Jawaharlal Nehru. The police attack left him with a permanent disability.

He was imprisoned twice during the civil disobedience movement in 1930 and 1932. He served another year-long term from November, 1940, during the individual "satyagraha" movement. He was detained in the Ahmednagar Fort between August 9, 1942, and March 31, 1945, during the Quit India movement.

In 1931, he was appointed chairman of the U.P. Agrarian Inquiry Committee and submitted to the Congress a monumental report, which became the valuable basis of the land reforms to which the party was committed in later years.

He was drawn into the Congress Working Committee in 1931 and continued to be a member almost without a break thereafter. In 1934, he served as the General Secretary of the All-India Parliamentary Board of the Congress. The same year, he was elected to the Central Legislative Assembly, in which he functioned as the Deputy Leader of the Congress Party.

When the Congress decided to accept office under the Act of 1935, Mr. Pant was elected to the U.P. Legislative Assembly and unanimously named leader of the Congress Party. He was consequently appointed Chief Minister of the United Provinces in 1937 and continued to be so until the Congress Ministries resigned on the war issue in 1939.

He was re-elected to the legislature in successive general elections after the war and led to the State as Chief Minister for a stretch of ten years, from April 1946, to January 1955.

Mr. Pant played a significant part in the high-level negotiations that led to freedom. He was one of the Congress representatives at the tripartite conference held in Simla in 1945 and carried on talks with the Muslim League leader, Mr. Jinnah, on the communal question.

He was elected to the Constituent Assembly in December, 1946, and served on several committees and subcommittees of the Assembly in the process of drafting independent India's Constitution.

His unchallenged stewardship of Uttar Pradesh in the next ten years made him indispensable to the State, but he responded to the call of duty when Mr. Nehru invited him to join the Union Cabinet as Home Minister in January, 1955.

His unfailing sagacity soon won him an unassailable place in the Government, in Parliament and in the Congress Party. His advice was always considered indispensable before important policy decisions were arrived at. He was awarded "Bharat Ratna" in 1957.

* * *

PANDIT GOVIND MALAVIYA

Shri Govind Malaviya, M.P. died in New Delhi on February 27, 1961. A week before he had been admitted in the Wellington Nursing Home with a liver complaint. A strict vegetarian, he refused to take liver extracts or any other animal proteins to cure his ailment.

Pandit Govind Malaviya (59) was the son of the late Pandit Madan Mohan Malaviya. Like his father, he was a great Sanskrit scholar and an educationist.

Born on September 14, 1902, he was educated at the Sanskrit Pathasala, A.V. School, Allahabad and Banaras Hindu University.

In the early 20's, he joined the Congress movement. He came into the limelight ten years later when he was nominated General Secretary of the Congress Working Committee.

He was imprisoned eight times for participating in the freedom movement since 1920. He attended the second Round Table Conference as Secretary to his father. In 1932 he organized the All India All Parties Unity Conference at Allahabad. He was the General Secretary of the A.I.C.C. in 1930 and of the All-Party Unity Conference in 1932. But much of his life

and work was devoted to the cause of education particularly at the University founded by his father. He was Pre-Vice-Chancellor of Banaras Hindu University in December 1947 and became its Vice-Chancellor in December 1948.

Mr. Malaviya was elected a member of the Constituent Assembly as a Congress nominee from Uttar Pradesh and later of the Provisional Parliament. He was elected to the Lok Sabha in 1957 General Election and represented the Sultanpur Constituency.

On the midnight, of August 14-15 a member of the Constituent Assembly stood up and blew a conch to herald the dawn of independence. The House was taken aback and it was noticed that it was the late Malaviya who blew the conch.

He was a powerful speaker and took part in almost all important debates.

He was for some time a director of the Hindustan Times Ltd.

He is survived by his wife, one son and seven daughters.

* * *

MR. A. N. KOSYGIN

Alexei Nikolayevich Kosygin, First Vice-Chairman of the U.S.S.R. Council of Ministers, arrived in New Delhi on Feb. 20, 1961 on a two-week visit to India at the invitation of the Prime Minister of India, Shri Jawaharlal Nehru.

A. N. Kosygin was born in 1904 in a worker's family in Petersburg (now Leningrad). In 1919 he volunteered for the Red Army. From 1921 to 1924 he studied in the Leningrad Co-operative Secondary School. On finishing this specialised secondary school he went on an assignment to Siberia where he worked till 1929 in the consumer co-operatives; was an instructor of a regional consumer co-operative union, a member of the board of the Lena Union of Consumer Co-operatives of the Irkutsk Region and Head of the Planning Department of the Siberian Territorial Co-operative Union. In 1935 he graduated from the Kirov-Textile Institute in Leningrad and then worked first as a foreman and later as shop superintendent at the Leningrad Zhelyabov Mill. In 1937 he was appointed Director of the October Spinning and Weaving Mill in Leningrad. He actively participated in the work of the Vyborg party organisation being a member of the Bureau of the Vyborg District Executive

of the Communist Party of the Soviet Union (Bolsheviks). In July 1938 A. N. Kosygin was appointed Head of the Industry and Transport Department of the Leningrad Regional Committee of the Communist Party of the Soviet Union (Bolsheviks), and in October 1938 was elected Chairman of the Executive Committee of the Leningrad City Soviet of Working People's Deputies. In 1939-40 he was People's Commissar of the textile industry of the U.S.S.R. At the 18th Party Congress (1939) A. N. Kosygin was elected Member of the Central Committee of the CPSU(B). In 1940-46 he was Vice-Chairman of the Council of People's Commissars of the USSR, while during 1943-46 he was simultaneously Chairman of the Council of People's Commissars of the Russian Federation. From 1946 to March 1953 he was Vice-Chairman of the Council of Ministers of the USSR.

During the years of the Great Patriotic War A. N. Kosygin carried out important state assignments for the country's defence. A. N. Kosygin was elected an Alternate Member of the Political Bureau of the CC CPSU(B) at the plenary meeting of the CC CPSU(B) in March 1946. From 1948 to 1952 he was a Member of the Political Bureau of the CC CPSU(B). In February 1948 he was appointed Minister of Finance of the USSR. In December 1948 A. N. Kosygin was appointed Minister of Light Industry of the USSR. At the 19th Congress of the CPSU (October 1952), he was elected Member of the CC CPSU. From September 1953 he was Minister of the Consumer Goods Industry of the USSR. From June 1957 A. N. Kosygin was an Alternate Member of the Presidium of the CC CPSU. Since December 1953 A. N. Kosygin was Vice-Chairman of the Council of Ministers of the USSR and from March 1959 was also simultaneously Chairman of the State Planning Committee of the USSR. In May 1960 A. N. Kosygin was appointed First Vice-Chairman of the Council of Ministers of the USSR.

A. N. Kosygin has been decorated with many Orders and Medals of the USSR.

MISS DOROTHY THOMPSON

Miss Dorothy Thompson, who died in Lisbon on Tuesday on Jan. 31, 1961 at the age of 80, was held in high esteem in many parts of the world for her work as American journalist, newspaper foreign cor-

respondent, and columnist. She was at one time (1928 to 1942) wife of Sinclair Lewis, the American novelist.

She was born at Lancaster, in the northern part of the state of New York, on July 9, 1894, the daughter of a British Methodist preacher, and went to school in Chicago where she remained until she was 17. Returning to her home she attended the University of Syracuse, not far away, and graduated in 1914. She had found a capacity for learning and speaking foreign languages and continued her studies after graduation at the University of Vienna.

In 1915 she went back to her home, having learnt much of the inside of Europe during the first year of the war. She found the struggle for woman suffrage at its height in the United States and at once threw herself into the battle with energy, taking on the work of director of publicity in the northern part of the state of New York. She then got her first insight into the workings of a newspaper office. The struggle for equal suffrage was soon over and the battle won and she then devoted herself to social work.

She was for several years foreign correspondent for the *Philadelphia Public Ledger* and of the *New York Evening Post*, and later travelled extensively in Europe and was well known in most countries. She wrote much of Germany after the Nazi Party came into power in 1933 and was outspoken in her comments on affairs there so that she was more than once at loggerheads with officials and was at last obliged to leave the country.

In 1947 she visited Europe again and spent some time in Poland covering the crucial elections of that year, elections that aroused keen interest throughout the free world. She damned them by saying simply that the voting was "just as free as in Mr. Hitler's elections."

The year 1951 saw her vocally active about the fate of Arabs in Palestine. As a speaker at the Chicago meeting of the anti-Zionist American Council for Judaism, she delivered a biting attack on the new State for allegedly discriminating against its Arabs, saying they were "forced to live as second-rate citizens with serious restrictions on their rights". In 1957 she published a book entitled *The Courage to Be Happy*.

(Continued on page 375)



FOREIGN EVENTS

SAGA OF SANTA MARIA

The Portuguese Liner "Santa Maria" was seized in Caribbean waters on January 23, 1961, by 70 rebels armed with machine guns. The rebels, led by former Capt. Henrique Galvao, arch opponent of Portugal's Prime Minister, Dr. Antonio Salazar, threatened to scuttle the 20,906-ton ship if any warship attempted to intercept her. There were 600 passengers aboard.

Despite the threat, the U.S. destroyers, **Wilson** and **Damato**, and the British frigate, **Rothsay**, pursued the **Santa Maria**. Three U.S. patrol planes helped the search.

The Lisbon communique issued on Jan. 24, said a group of nearly 70 passengers of various nationalities "assaulted" the liner at 2 a.m. yesterday after she had left Curacao, Dutch West Indies. They killed the third pilot. Joao Jose do Nascimento Costa, and seriously wounded an officer, Traanee, a doctor and several other members of the crew, the communique added.

Then the rebels "violently forced the rest of the crew to obey their designs and change the normal route." The captain, Mario Simoes Maia, was reported held captive. The takeover came while the passengers—American, Dutch, Venezuelan and Portuguese—and many of the crew were sleeping.

On Jan. 23, the Santa Maria appeared off the mountainous British island of St. Lucia, at the southern end of the West Indies chain, and put some wounded ashore by launch. She signalled the harbour authorities at St. Lucia that she wanted to put ashore two men—one with gunshot wounds and another with jaundice. The six others put ashore were unharmed.

The wounded man, the second purser, who was the only man in the group who spoke English was taken aboard the **Rothsay** where a conference was hastily called. Naval units in the area were immediately alerted, and the frigate put to sea with the purser aboard in pursuit of the liner.

The communique said that at La Guaira,

Venezuela, and Curacao, the Santa Maria took aboard, along with several hundred passengers, about 70 persons of various nationalities headed by Galvao, who had planned the "crime".

In Washington, the Defence Department said U.S. destroyers had been sent to intercept the Santa Maria under the well-defined terms of international law governing piracy and insurrection aboard ship. Officials said the warships had been told to search her when they find her.

The British Admiralty stated in London on Jan. 24 that its frigate, **Rothsay**, had failed in her search for the Santa Maria.

Warships and planes of three nations continued on Jan. 25 the hunt for Santa Maria. Capt. Henrique Galvao issued one radio message saying his aim was "to free all of Portugal" and praising Brazil, where he was said to be heading. He said all was normal aboard and the 600 passengers well and mostly "enthusiastic" at his move.

In Rio de Janeiro, the Brazilian capital where he took refuge after his defeat in the last Portuguese Presidential elections, Gen. Humberto Delgado issued an urgent appeal to Britain and the U.S. not to interfere in an act which "does not represent either mutiny or piracy."

Delgado was named as head of the rebel "junta of liberals" in Galvao's radio message.

President Kennedy received a cable from Gen. Humberto Delgado calling for an end to U.S. aerial surveillance of the Portuguese cruise ship, Santa Maria, the White House said on Jan. 27.

President Kennedy confirmed at his Press Conference that the Portuguese liner, Santa Maria had been located by a plane of the U.S. Navy about 600 miles north of the mouth of the Amazon. The speed of the Santa Maria was about 15 knots, he added.

In Sao Paulo, Brazil, Gen. Humberto Delgado, the exiled anti-Salazar leader, said the rebels would fight to death if force was

used to stop them. "War is war," he declared.

Gen. Delgado said in an interview the matter was a Portuguese affair, and claimed it would spark off a "chain reaction" against the Salazar regime.

A Portuguese Government statement in Lisbon, however, claimed that only six Portuguese were among the 70 armed men who took over the ship.

The operations centre of the United States naval base at San Juan, Puerto Rico, disclosed on Jan. 28 that the Brazilian Government had grounded all U.S. Navy aircraft which were taking part in the tracking of the Portuguese liner, Santa Maria, from Brazil.

A spokesman said the Brazilian action had apparently resulted from the fact that because of the urgency of the air-sea operations by the U.S. Navy, U.S. planes had not had time to fulfil completely Brazilian Government regulations and requirements.

As an example the spokesman said that the Brazilian Government required full and complete details of the identity of U.S. planes and their pilots, including names.

A senior U.S. Navy officer made preparations to parley with rebels aboard the Portuguese liner Santa Maria as the liner sped toward the Brazilian coast on Jan. 28. A report broadcast from New York said that the rebel chief, Capt. Henrique Galvao had agreed to put into a north Brazil port. He was also said to have radioed U.S. pilots who flew over the liner that he would return the liner to its lawful master "if certain guarantees are met."

The rebel-held Portuguese liner Santa Maria was believed to be standing 30 nautical miles off the Brazilian port of Recife with its engines shut on Jan. 29, and rumours spread that the passengers—about 600—might be disembarked on the high seas.

Capt. Henrique Galvao radioed a message that the ship might not be able to disembark the passengers at the port because of "tactical reasons."

According to a report from Rio de Janeiro, a radio station at Recife on the tip of Brazil's Atlantic bulge quoted the leader of the ship as saying that he would stop the liner five miles offshore to parley with U.S. and Brazilian authorities.

Brazil's Navy was ordered to board Santa Maria if it lands in a Brazilian port to allow representatives of the ship's parent company, the Portuguese Colonial company, to go aboard.

It was learnt on Jan. 30 that a meeting between Capt. Henrique Galvao and Rear Admiral Allen Smith, Commander of the U.S. Caribbean Sea Frontier would next day take place aboard the rebel-held Portuguese liner Santa Maria about 35 miles east of Recife to arrange the disembarkation of passengers.

Adm. Smith went aboard the Santa Maria lying off Recife on Jan. 31 to negotiate the disembarking of the passengers. On Feb. 1, Santa Maria entered the Brazilian port of Recife. Rigorous steps were taken at the port to prevent any incidents.

Gen. Humberto Delgado, the exiled Portuguese Opposition leader, arrived at Recife by air from Rio de Janeiro on the same day.

The first batch of passengers from the seized liner 'Santa Maria,' were landed by tug on Feb. 2.

The Portuguese Opposition leader General Humberto Delgado had been on board the liner since the previous night.

The judge of the maritime court at Recife had acceded to the request of the Colonial Navigation Company, owners of the "Santa Maria", for a provisional seizure of the liner.

Armed Brazilian marines with tear-gas canisters protruding from their pockets appeared in firm possession of the 'Santa Maria' on Feb. 3, while negotiations between the rebel leader, Captain Henrique Galvao and the Brazilian Navy dragged on. The ship-owners were hoping to take over the liner under a writ of attachment obtained from a Brazilian court. Meanwhile Brazil granted the right of asylum to Captain Galvao. A Brazilian Government communique said that if Capt. Galvao and his followers sought asylum in Brazil they would have to give up their arms. It added that the status of the ship would be settled according to Brazilian laws.

On Feb. 3, President Quadros of Brazil signed a decree formally handing over the "Santa Maria" to the Portuguese Government.

The Portuguese Ambassador to Brazil

instructed his Naval Attache to take possession officially of the liner.

Earlier Capt. Henrique Galvao, the insurgent leader who seized the liner a fortnight ago and his 28 followers announced that they would leave the ship and hand it over to the Brazilian Navy.

Capt. Galvao and his men left the ship at 10-20 p.m. G.M.T., and were taken by bus to the Recife military police barracks, where they were to spend the night. Capt Galvao and his 28 men were granted political asylum by Brazil on leaving the ship.

This was a sequel to an agreement between the rebel leader and the Brazilian authorities after negotiations. The conditions of the agreement were that the ship would be handed over to the Brazilian Navy, that its future would be decided by the Brazilian Government in accordance with international law and that Capt. Galvao and his followers would receive political asylum.

Read-Admiral Fernandez Diaz of Brazil formally handed over possession of the liner Santa Maria to Col. Luz Cunha, Portuguese Naval and Military Attache at Recife on Feb. 4. Colonel Cunha took the keys of the strongroom and immediately handed them to the Colonial Navigation Company, agents for the owners.

The Portuguese Government said in a statement early on Feb. 5 that it did not intend to take any steps to secure the handing over of Captain Henrique Galvao and the rebels who seized the liner, "Santa Maria."

The Portuguese insurgent leader, Capt. Henrique Galvao, and 28 Portuguese and Spaniards who helped him commandeer the "Santa Maria" arrived at Rio De Janeiro on Feb. 9 from Recife to take up residence under the political asylum granted by Brazil.

* * *

RIOTS IN LUANDA

Three groups of armed men tried on the night of Feb. 3, 1961 to attack a military prison, a police barracks and the civil prison in Luanda, Angola, Portuguese West Africa. The aim of the attack was to free prisoners but the attempt failed. A spokesman at the Governor General's Office said the episode lasted about 30 minutes. "There is complete order and the population is calm," he said.

"Some of the attackers were coloured and others were white. There were some foreigners among them," he said.

A communique by the National Secretariat of Information in Lisbon said most of the attackers had been arrested, and order had been restored.

The communique said the Governor General of Angola Dr. Alvaro de Silva Tavares, had received reports from abroad stating that these attacks were timed to coincide with the assault on the "Santa Maria."

The Portuguese newsagency, Lusitania said: "It is clear that those who organised the attacks wished to take advantage of the presence in Luanda of foreign newspaper men who had come here to cover the story of the "Santa Maria".

At least 16 people were killed in Luanda according to Lisbon newspaper reports. The casualties included six European policemen and one Army corporal, and at least nine people who had attacked them, the report said. Three policemen were reported to have been seriously injured. Four people were killed and seven injured in a gun battle on Feb. 6 between security forces and rebels at the funeral in Luanda, Angola of six policemen and a soldier killed in the riots on Feb. 5.

The Governor-General of the Portuguese West African colony threatened severe punishment against those responsible for the week-end riots in which 24 or 25 people had died.

According to the Portuguese news agency, Lusitania, battle on Feb. 6 started when security forces detected rebels among the crowd of many thousands attending the funeral. The rebels fired first, the agency said. Thirteen of the 14 rebels were killed and many injured in incidents of the previous day which included attacks on Government buildings.

Lusitania said that five of those detained after the riots were found to be white Portuguese who had blackened their faces so that they could mingle unnoticed among the African attackers. Most of the rioters were not of Portuguese nationality, the agency added. According to reports received at Lisbon on Feb. 7, thirty one people including seven police or soldiers were killed in the week-end fighting in Luanda.

Lisbon newspapers published that three

opposition leaders had held talks with President Americo Tomas. The three men represented 39 leading opponents of the Prime Minister, Dr. Antonio Salazar. They had asked the President to give Portugal a Government which would "return to the Portuguese their fundamental liberties".

On Feb. 7, Portuguese paratroop units flew from Lisbon to reinforce police and other army units in Angola.

On Feb. 10, armed rioters exchanged fire with security forces in a new attack on a prison in Luanda, capital of Angola. According to reports 7 rioters were killed, 10 injured and over 20 arrested. It was the third shooting riot in Luanda in a week. Sudden riots in Luanda had caught the Portuguese authorities off guard. The official toll up to Feb. 16 was 31 dead, including seven members of the provincial armed forces and 24 "assailants." At least 53 persons were reported to have been wounded and 100 arrested.

This was the most serious outbreak of disorder in recent memory in Angola, the tightly ruled and normally tranquil "showcase" of the Portuguese Empire. It was established that most of the "Assailants," estimated to have numbered 150 to 180, were Africans. Before dawn on Saturday, February 4, they attacked three points guarded by Portuguese, the civil prison, where 200 to 300 Africans were committed for allegedly routine misdemeanours, the barracks of the mobile police and the barracks of the security police.

Quiet returned the same day, but the next day trouble flared up when a crowd of several thousand persons assembled at the cemetery of the crosses for services for the members of the armed forces killed the day before. At this point, police reinforcements arrived and prevented an outbreak of fighting between the Europeans and Africans.

Portugal's economic and social structures are remnants of 19th century Europe. Portugal has Europe's lowest literacy rate and per capita income and the highest mortality figures and tariff barriers. It has a very small upper class, a preponderant lower class and, numerically speaking, an insignificant middle class made up of lawyers, doctors, teachers and clerks.

It is ruled by its "fifty families," who run the economy, help choose the rump

National Assembly and give full-throated support to the dull regime of Dr. Antonio de Oliveira Salazar. In Portugal trains run in time. But almost everything else is behind time.

It has a President but he is more of a figurehead than any other Head of State. The real ruler, as all the world knows, is the ascetic Dr. Salazar, who has been in power continuously for 30 long years—a whole generation, in fact. He is certainly Europe's only durable dictator with a flair unusual among his kind, for avoiding the headlines. He shuns publicity, drinks and cigarettes.

It is hard to predict how long this bachelor and former professor of economics, who brought peace and stability to Portugal after decades of turmoil, will continue to hold power. Intelligence from Portugal gives no indication of his probable successor. That is why Gen. Delgado's opposition to his regime assumes importance. Today, under a one-man rule, Portugal permits no political parties. Politics is virtually outlawed, as the London "Times" correspondent said, "as a topic of conversation above a whisper." But opposition to the regime is reported to be steadily mounting. According to a conservative estimate there are more than 3,000 political prisoners in Portugal.

People In The News (Continued from page 371)

Her marriage to Josef Bard and Sir Clair Lewis were dissolved, and in 1943 she married, thirdly, Maxim Kopf, the well-known artist and sculptor, and thereafter spent a good deal of time in New Hampshire where Kopf had a studio. He died in Hanover, New Hampshire, in 1958, at the age of 65.

She ended her newspaper career in August, 1958, a month after her third husband, Maxim Kopf, died. She tried to continue her column, but, overcome by grief and loneliness, she could not.

He who will not reason, is a bigot; he who cannot is a fool; and he who dares not is a slave.—Sir William Drummond

* * *

The heart has reasons for which reason has no knowledge.—Pascal

HOME AFFAIRS

NEW BIHAR CABINET

A sevenman Cabinet, headed by Mr. Binodanand Jha, was sworn in by the Governor of Bihar Dr. Zakir Hussain at Raj Bhavan, Patna on Feb. 18, 1961.

The Governor also administered the oath of office and secrecy to six Deputy Ministers.

All the Deputy Ministers had served in the same capacity in the previous Ministry.

Following is the list of new Ministers and their portfolios:

Mr. Binodanand Jha, Chief Minister. Appointment and Political, excluding Information and Transport; Cabinet Affairs; Finance and Industries, including Mines and Mineral Resources; Gram Panchayat and Labour.

Mr. Deap Narain Sinha: Major irrigation; Power; River Valley projects and information.

Mr. Bhola Paswan: Forests, Welfare; Public Works; Public Health, Engineering Department and Excise.

Mr. Birchand Patel: Food Supply; Health; Agriculture; Iron and Steel, Medium and Minor Irrigation, and Transport.

Mr. Satyendra Narain Sinha: Education and Local Self-Government.

Mr. Jafar Imam: Law; Religious Trusts, Jails and Relief and Rehabilitation.

Mr. Raniprakash Lal: Co-operation; Housing; Animal Husbandry and Veterinary.

Deputy Ministers:

Mr. A. A. M. Noor: Food, Relief and Rehabilitation, Revenue and Welfare.

Mr. Kedar Pandey: General Administration, Political, Irrigation, Power, Transport and Labour.

Mr. Ambika Saran Singh: Finance, Law, Religious Trust and Jails.

Mr. Chandrika Ram: Agriculture, Health, Forest and Excise.

Mr. Deo Narayan Yadav: Cooperation, Housing, Animal Husbandry and Veterinary, P.W.D. and Public Health and Engineering Department.

Mr. Daroga Prasad Rai: Community Project, Gram Panchayat, Industries, Education and Local Self-Government.

Background: After the death of Dr. Sri Krishna Sinha, the Chief Minister of Bihar, Mr. Dip Narayan Sinha, Minister for Irrigation, Electricity and Information, was sworn in as Chief Minister of the caretaker Government of Bihar on Feb. 1, 1961. The Congress Circles welcomed the appointment of Mr. D. P. Sinha as Chief Minister and believed that he would be unanimously elected leader of the Congress party in the State Assembly and therefore continue as Chief Minister until the coming election. Mr. D. P. Sinha was the senior most member of the cabinet of late Dr. S.K. Sinha. All other Ministers and Deputy Ministers of the outgoing Cabinet were retained and sworn in on the same day.

A meeting of a section of the State Congress Legislature Party at Patna on Feb. 3 announced the candidature of Mr. Mahesh Prasad Sinha for election as Chief Minister of Bihar. A rival group, led by Mr. K. B. Sahay, also decided to set up its own candidate on the ground that it was not consulted by the other group for setting up an agreed candidate.

Members of the Bihar Congress Legislature Party chose their leader by secret ballot at a closed-door meeting held at Patna on Feb. 7. Mr. N. Sanjiva Reddy, the Congress President, presided.

Two hundred and sixty-nine out of the 277 members of the party, it is learnt, cast their votes. The absentees included the Speaker of the Vidhan Sabha and the Chairman of the Vidhan Parishad.

The members were allowed to name anybody they liked for the leadership of the party but it was learnt that their choice was restricted to the two rival candidates, Mr. Mahesh Prashad Sinha and Pandit Binodanand Jha.

The Revenue Minister, Mr. Binodanand Jha, was unanimously elected Leader of the Bihar Legislature Congress Party, it was announced on the morning of Feb. 8.

The president of the Congress, Mr. Sanjiva Reddy, presided over the party meeting at which Mr. Jha was elected.

Mr. Jha's name was proposed by the caretaker Chief Minister, Mr. Deep Narain Sinha, and seconded by the Minister for Co-operation, Mr. Jagat Narain Lal.

At the outset, Mr. Reddy stated that on the basis of the voting at a meeting of the Party last night (Feb. 7) he was in a position to say that Mr. Jha had the support of a large majority of members. He suggested that Mr. Jha be elected Leader.

Soon after the election Mr. Reddy told newsmen that he expected the active co-operation of all members, both in the organisational and legislative wings, to be given to the newly-elected Leader.

After the election, Mr. Jha drove to the residence of Mr. Mahesh Prasad Sinha and sought his blessings. Mr. Sinha embraced the newly-elected Leader and congratulated him on his success. He told newsmen that he had assured Mr. Jha of his co-operation.

Soon after his election Mr. Jha called on the Governor, Dr. Zakir Hussain. The Governor requested Mr. Jha to accept the office of Chief Minister and to submit to him names of other members of the council of Ministers at his earliest convenience.

Later in the day the care-taker Chief Minister, Mr. Deep Narain Sinha, called on the Governor and submitted his Government's resignation. The Governor asked him to continue as Chief Minister till the new Ministry was formed.

Having failed to satisfy the various groups of his supporters while finalizing his Cabinet, Mr. Binodanand Jha rushed to Delhi on Feb. 12 to have talks with Congress leaders on the question of the personnel of Ministry.

Mr. Mahesh Prasad Sinha, leader of another group, who was Mr. Jha's rival for the Chief Ministership also arrived in the Capital on Feb. 14 on urgent summons from the Congress President.

Mr. Jha and Mr. M. P. Sinha had separate meetings with the Congress President, Mr. Sanjiva Reddy, in New Delhi on Feb. 17.

According to reliable sources the choice of senior Ministers, which belonged to one particular group, had frustrated the professed desire of the Congress High Command to have a "broad-based" Ministry.

A spokesman of the group, led by Mr. M. P. Sinha, said in New Delhi that the talks between Mr. Sinha and Mr. Jha had broken down.

The main reason for the breakdown of talks between Mr. Sinha and Mr. Jha, the spokesman said, was that "Mr. Jha could not make himself approach the whole question from a family spirit."

Mr. Sinha had also written to Mr. Nehru, Mr. Pant, Mr. Reddy and other High Command leaders in this connection.

Later, on the advice of Congress leaders a list of Ministers was finalised and the new ministry was sworn in on Feb. 18.

NAGALAND INTERIM SET-UP INAUGURATED

The Governor of Assam, Gen. Shrinagesh, on Feb. 18, 1961 inaugurated the interim set up of Nagaland at a ceremony held at Kohima. About 1,000 delegates from all over Nagaland attended the inauguration. The new State itself will come into being when Parliament passes the Bill amending the Constitution.

Forty-five members of the Interim Body were sworn in. These members representing 14 Naga tribes will constitute the State Assembly until Nagaland formally comes into being and elections take place for the Assembly and Parliament. They will advise the present Centrally controlled administration in day-to-day activities.

Naga hostiles opened fire from a hill overlooking Kohima as the interim Body members were being sworn in.

After the swearing in ceremony the Governor called upon all Nagas to join hands in making the agreement successful.

Dr. Imkongliha Ao, President of the Naga People's Convention, was elected Chairman of Nagaland's Interim Body on Feb. 17. And Mr. Shilu Ao was elected chairman of the five-member Executive Council.

The Executive will advise and assist the Governor in the exercise of his functions (other than finance and maintenance of law and order) and on matters specified by him.

The following are the members of the Executive Council: Mr. Shilu Ao, Mr. Jaso-kie Angami, Mr. Hoishe Sema, Mr. R. C. Chiten Jamir and Mr. Akum Imkong Chang.

The President had promulgated on Jan. 24, 1961 the Nagaland (Transitional Provisions) Regulation, 1961 to bring into operation a new administrative set-up for Nagaland.

The Prime Minister, Mr. Nehru in a message issued in New Delhi on the occasion of the inauguration of the 'interim body' for Nagaland on February 18 expressed the hope the new developments in Nagaland would "advance the cause and welfare of the people and put an end to disruptionist activities."

DETENTION OF MAHARAJA OF BASTAR

Maharaja Pravin Chandra Bhanj Deo of Bastar was taken into custody on Feb. 11, 1961, under the Preventive Detention Act somewhere near his home town of Jagdalpur in Madhya Pradesh. The 31-year-old Maharaja was taken into custody immediately after he entered Bastar district from Cuttack where he was reported to be staying for some time past. He had not returned to Jagdalpur since his visit to Delhi in January to meet Home Minister Pant. He is being kept at Narsinghgarh jail, 60 miles from Bhopal.

Following reports appearing in the Press that the Katju Government had passed order for his arrest if he entered the State, the Maharaja issued a statement from Cuttack earlier in February announcing his decision not to enter Madhya Pradesh for the present.

Madhya Pradesh Chief Minister Katju had advised the Maharaja in November 1960 to leave the district for some time. He had also asked the Maharaja to come to Bhopal for talks. The Maharaja ignored the advice of Dr. Katju and also did not come to Bhopal to meet him.

The Maharaja has been demanding that his estate should be released from the Court of Wards and the amount of his privy purse should be raised.

The President of India withdrew the recognition of Maharaja Pravin Chandra Bhanj Deo and recognised instead his brother, Mr. Bijay Chandra Bhanj Deo Kaktiya, as the ruler of Bastar (The privy purse of the new Bastar ruler was fixed at Rs. 15 lakhs against Rs. 21 lakhs paid to the deposed ruler.)

The President's order listed the various prejudicial activities of the deposed

Bastar Maharaja, including his recently announced intention to form a new chamber of "princes" and "work for the establishment of a Hindu State in India."

Other actions of the former ruler included his recent public statement in Delhi, Lucknow, Calcutta and Cuttack, his agitation among the tribal people against the merger of Bastar, to which he had not been reconciled since 1948, and his threat to declare himself an independent ruler of the people of Abjhumar area in Bastar State and to foment disorder and rebellion there.

The President's order has been issued under Article 366 (22) of the Constitution. This was the second time the President exercised his power in this manner under this Article. The previous occasion was in 1951 when he withdrew recognition from the Maharaja of Baroda and recognised his son Yuvaraj Fateh Singhji, as the ruler of Baroda.

A press communique issued by the Home Ministry said: "The Government of India have for some time now been considering with serious concern the activities of His Highness Maharaja Pravin Chandra Bhanj Deo Kaktiya of Bastar. The Maharaja, like the rulers of other former Indian States, executed a Covenant of Merger and Bastar State was integrated with Madhya Pradesh, then Central Provinces, in January, 1948. Soon afterwards, however, reports began to reach the Government of India that the Maharaja was leading a life of depravity and indulging in very objectionable activities and it appeared that he had not reconciled himself to the merger of his State. He was distributing money and appealing to the people in Bastar District for their assistance in recovering his 'gaddi'.

"Because the Maharaja was behaving in an erratic and irresponsible manner and was squandering his resources and had proved himself incapable of looking after his properties, his estate was placed under the management of the Madhya Pradesh Court of Wards in June 1953. Thereupon the Maharaja embarked on an active campaign of creating disaffection among the people of Bastar and inciting them to acts of violence and lawlessness. The activities of the Maharaja became a source of danger to the maintenance of public order in Bastar district.

"The Maharaja has also been threatening to use his influence among the people of Bastar to foment disorder and rebellion. He and that the people of Bastar would rise in armed rebellion and there would be a large-scale massacre as happened during the rebellion of 1910.

"The Maharaja has also declared his intention of forming a chamber of princes to present a united front against the Government and raise a demand from the princes for the restoration of their States to them. He said the new chamber of princes would work for the establishment of a Hindu State in India.

"The President has regretfully come to the conclusion that the Maharaja is engaging himself in extremely prejudicial activities and that he has forfeited all claims to the continued enjoyment by him of his present position as the ruler of the former State of Bastar.

"Accordingly, in exercise of the powers vested in him under Article 366(22) of the Constitution, the President hereby directs that, with effect from the date of this order, His Highness, Maharaja Pravin Chandra Bhanj Deo Kaktiya of Bastar do cease to be recognised as the ruler of Bastar, and that his brother, Yuvraj Vijay Chandra Bhanj Deo Kaktiya, be recognised as the ruler of Bastar in his place."

The new ruler of Bastar is 27 years old.

After the death of Maharaja Rudra Pratap Deo in 1921 his daughter Prafulla Kumari Deo succeeded to the Bastar gaddi. She married Prafulla Bhanj Deo, a relation of the Mayurbhanj ruling family, and the present Maharaja was born in 1929 of this alliance. The present Maharaja succeeded to the gaddi at the age of six years on the death of his mother. The State was placed under minority administration but on the eve of relinquishment of power in 1947, the British vested him with full powers, even though he was only 18 years.

Bastar, along with other Chattisgarh States was merged in the Central Provinces in January 1948.

The Maharaja of Bastar did not, however, reconcile himself to the merger and behaved "in an erratic and irresponsible manner".

Consequent on his activities in October

1952 his father, Prafulla Chandra Bhanj Deo, an Opposition member of the Rajya Sabha then, wrote to the Prime Minister requesting him to advise the President of India to withdraw recognition from his eldest son and confer the gaddi on his younger brother. His father then wrote, "All efforts to bring my eldest son back to reason and normal ways of life have been exhausted and I, as his father, have been most assiduous in my efforts in this direction."

INDIAN INVESTMENT CENTRE

The Indian Investment Centre was inaugurated in New Delhi on February 16 by the Finance Minister, Shri Morarji Desai. The main objects of the Centre are to promote wider knowledge and understanding in the capital exporting countries of investment opportunities in this country and to advise and assist Indian industrialists on steps to attract private foreign capital.

In his address, Shri Desai said, the Centre was being started at the right time because the aims and methods being followed in this country were now better understood abroad. The importance of the public sector in this country and its necessity was also now recognised all over the world. He pointed out that industries in the private sector had increased 5 or 6-fold in the last few years. This would not have been possible but for the expansion of the public sector. He said there was no conflict between the two sectors and they had to work in close cooperation for the prosperity of the people.

Shri Desai said private foreign investment was important not only because of the valuable foreign exchange it brought but also for know-how and new management techniques. He said he looked forward to the Centre for help in streamlining procedures so that the foreign investors did not have to go from one place to another seeking information about investment opportunities and other related matters.

The Chairman of the Governing Body of the Centre, Shri G. L. Mehta, in his speech said, compared to the substantial amount of borrowing from foreign Governments and international institutions in the past 3 or 4 years, the volume of foreign private investments in this country had

(Continued on page 385)

Parliamentary Affairs

(February 14 To March 4, 1961)

PRESIDENT'S ADDRESS

The Budget Session of Parliament began in New Delhi on February 14, 1961 with an address by the President to a joint sitting of the two Houses.

The President referred to the India-China border question and said that India could not accept the results of the unilateral action or decisions taken by China. There had been no further attempts to violate our territory, but Chinese intransigence continued.

Dr. Rajendra Prasad said India's peaceful but firm policy and her progressive preparedness for defence had profoundly influenced world opinion. While constantly trying to maintain her defensive strength, India would seek to adhere firmly to principles which in her opinion were basic in relations with other countries. It was her hope, the President said, that China, despite her present unwillingness and intransigence would soon persuade herself to come to a satisfactory agreement. This would place the relations between the two countries on a lasting basis and would contribute to their common good, and to stability in Asia and world.

The President spoke of the Congo where he said the prestige of the United Nations as an instrument to settle world problems and protect the weak against aggression was involved.

Dealing at some length with India's economic progress Dr. Rajendra Prasad said the outlook was promising. The year just ending might on the whole turn out to be a very good year in farm production. This and measures to build up reserve stocks had brought about a healthy trend in prices. Industrial output had gone up in some cases spectacularly. New sources of oil had been found. The inauguration of the third reactor had advanced the prospects of the use of atomic energy in industry and agriculture and in medicine. The President expressed the hope that by the end of this year Panchayati Raj institu-

tions would have been introduced in all States.

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THE SINO-INDIAN BORDER QUESTION

The Prime Minister presented to the Lok Sabha on February 14, 1961 the report of the officials of India and China on the border question. A comparative study of the evidence given by the two teams bring out the following outstanding facts:

It is established beyond doubt that the true traditional boundary is the one shown by India and the Chinese are in illegal occupation of about 12,000 square miles of our territory. Till September 1959, China had led India to believe that she accepted the traditional Indian alignment of the border and then suddenly she came out with claims to about 50,000 square miles of Indian territory. China had now declined to recognise Kashmir's accession to India, and had also gone back on the acceptance by Mr. Chou En Lai, only 10 months ago of India's relations with Bhutan and Sikkim.

The evidence put up by India from a vast and varied material was overwhelmingly superior to the Chinese both in quantity and quality. The evidence was clear and precise and had support in tradition, custom and administrative continuity. The boundary shown by India lay along the main watershed in each region and was the natural dividing line between the two countries. This evidence clearly established that Aksai Chin in the Western Sector was never part of China. The areas now claimed by China in the middle sector were from the beginning of history parts of Indian kingdoms and administered by Indian rulers; and in the eastern sector Indian political authority had been exercised continuously for over 130 years, in the areas now claimed by China. India showed in her support a large number of international treaties, agreements and conventions, and to give only one example a note by China in 1947 recognising the McMahon Line Agreement contained in the Simla Convention.

On the other hand, the Chinese maps were incomplete and their information imprecise. The Chinese alignment followed no natural features at all. On the Western Sector, their case consisted mostly of unsupported assertions. For the middle and eastern sectors they could not bring forward any evidence of tradition and custom.

The Chinese evidence was often self-contradictory almost to the point of embarrassment to the Chinese side. For instance, they spoke of Tibet of never having any right to deal with other countries and yet put forward in their support evidence of negotiations held by Tibetan representatives. Again, the Chinese sought to dismiss evidence on the ground of its British source but themselves quoted from British records, to seek support for their stand. When the Chinese brought up the border treaties with Nepal and Burma the Indian team proved that basically these treaties confirmed India's position and not China's.

The latest authenticated map produced by the Chinese officials claimed new territory in the western sector and was at variance with the 1956 map, which Mr. Chou En Lai had then claimed, showed the traditional boundary. There was divergence not only with the Chinese official map but between the positions taken by Mr. Chou En Lai last year and taken by China now.

Shri Nehru told the Lok Sabha that India had undertaken full responsibility for the defence of Bhutan in case of aggression. Any aggression on Bhutan would be considered as aggression against our country. He added that the Bhutan National Assembly had specifically asked the Government of India to deal with the matter.

Shri Nehru said, there was no question of his visiting Peking in the immediate future nor were Government contemplating any steps for further negotiations with China at the present moment.

Shri Nehru also informed the House that Government could not recognise the erroneous depiction of the boundary lines of India, Burma and China in the map attached to the recent Sino-Burmese border treaty. Such a recognition was likely to prejudice India's sovereignty over 75 square miles of her territory.

* * *

RAILWAY BUDGET

The Railway Budget presented to Parliament on Feb. 15, 1961, shows a revenue surplus of more than Rs. 8.5 crores during the financial year beginning in April, 1961.

The gross traffic receipts for the coming year have been put at Rs. 499 crores and ordinary working expenses at over Rs. 232 crores. Of the net revenue of more than Rs. 86 crores, a sum of over Rs. 65 crores would be paid as dividend to General Revenues. The States would be given Rs. 12.5 crores in lieu of the tax on passenger fares.

During the current year the railway surplus is expected to be about Rs. 14 crores which will be Rs. 4.5 crores less than was estimated. The drop is in the expected earnings from freight traffic.

There will be no change in passenger fares or in freight rates generally. The special surcharge on small goods consignments will, however, be increased from 10 per cent to 20 per cent to discourage the movement of such consignments as they involve disproportionately greater costs, care and attention. For the same reason the minimum distance charge for coal would be 70 kilometers. For movement of coal for shorter distances the charge would be at least Rs. 5 per ton.

During the Second Plan the capital investment in the railways increased to Rs. 1,559 crores. The railways carried 50 per cent more traffic than what they carried five years ago. There was also an increase in freight traffic during the Plan period.

The Second Plan target of constructing 800 miles of new lines would be fully achieved. Doubling of track over 800 miles would also be completed while work would be in progress on another 500 miles. The bridge over the Brahmaputra is likely to be completed next year.

During the Third Plan, Rs. 1,255 crores has been allocated but there is a possibility of increased allotments for the construction of new railway lines particularly in the South. It is proposed to construct more than 1,100 miles of new lines, of which 200 miles would be for developing new coal fields and industries. Also, about 1,100 miles of railway lines would be electrified during the Third Plan and a new plant would be set up in the public sector for manufacturing diesel locomotives.

NEHRU'S STATEMENT ON CHINA

Mr. Nehru declared on February 20, 1961 that the Sino-Indian frontier question could be settled only when the Chinese vacated Indian territory under their occupation and when they "broadly acknowledged" the Indian position on the frontier.

Mr. Nehru, who was intervening in the Rajya Sabha debate on the President's Address, said there was no 'dispute' so far as India was concerned over the frontier with China and there could be no question of negotiations and horse-trading.

Mr. Nehru said he could not rule out for all time a visit by him to Peking for discussions with the Chinese but ruled out any such possibility at present.

The Prime Minister added "The question of talks arises only when there is justification for something emerging out of talks, and what we say about this matter being broadly acknowledged by the Chinese Government. That is the position."

Basically this kind of conflict between India and China was obviously a matter of grave import to India and to the world. Some members had criticised the Government for not taking steps to deal with the matter.

Mr. Nehru added "I would beg of this House to consider this question from the practical point of view. It is not an easy matter to indulge in a policy of action which step by step almost inevitably leads to war."

"A war, anywhere, according to our thinking, is undesirable because a small war may lead to a big one. But a war between India and China is something which no one can welcome. If it is thrust on us, that is a different matter."

"Also, if it has to be war, one has to prepare for it. One does not in a Don-Quixotic way go about with lance in hand and drive out the aggressor."

"One prepares for it (war). It is a big thing which may last for a long time. It is not a small police action. We have to prepare for it—strengthen ourselves in many ways and the main thing is to be clear in our minds and be firm and determined in our resolve."

"We must be clear in our minds and not merely emotionally—emotional we are—and be firm and determined as to what

our position is, and what we want and prepare for it, whether it takes a month, a year or several years. And meanwhile always to seek methods on the one side of solving that problem peacefully and on the other strengthen ourselves by other methods. That is broadly the policy."

"According to our thinking," Mr. Nehru continued, "our trouble on the border is not a dispute with China." But he added that there might be two opinions. Rightly or wrongly, the Chinese opinion was different.

He said: "Now this series of talks between the officials of India and China have I think very largely put an end to any doubt in those peoples' minds who had doubts about the real facts of the case. That was necessary."

The Prime Minister denied that the Chinese forces had extended their occupation of Indian territory. He, however, added that he could not guarantee that they had not marched into some little curve.

Mr. Nehru said it was correct that the Chinese were now claiming 2,000 sq. miles more of Indian territory. "One very extraordinary fact which stands out during these past few years is the changing position of the Chinese Government in regard to these matters and, what is more, the changing maps that come out from time to time," he added.

"The fact of the matter in our case in regard to the border is almost fool-proof. It does not require high intelligence to realise it. And whatever the reason for the Chinese doing, it, they did wrong in occupying it and the question will only be settled when they vacate this territory. And there can be no question of horse-trading in this, you take this, and we will take this, and we will halve it."

MR. NEHRU'S REPLY TO DEBATE

India's northern frontier was being well protected to prevent any further intrusion, the Prime Minister assured the Lok Sabha on February 23, and since the autumn of 1959, the situation there had stabilized. No aggression has occurred since.

Mr. Nehru, who was replying to the four-day debate on the motion of thanks for the President's Address, deprecated criticism of Burma for her recent boundary treaty with China. India had no grievance about the terms of the treaty as such ex-

cept that a map attached to the treaty delineating the India-China-Burma trijunction did not correspond to Indian maps.

Much of the Prime Minister's speech was devoted to giving a resume of China's aggressive activity on the border to refute the charge made by some members that Parliament had been kept in ignorance of the facts for an unduly long period. Chinese consolidation west of the Aksai Chin highway, he said, had taken place between June and October 1959. The Government of India had been alert about the border after China marched into Tibet but the chief danger was apprehended in the NEFA region.

While China had begun levelling the highway to convert it into a motorable road in 1955, it was not clear then whether it crossed India's limits. Suspicions were aroused in 1957 by the publication of a map in Peking. Patrols sent out in the summer of 1958 had confirmed these suspicions.

While promising that the Government would consider bringing out defence White Papers from time to time, Mr. Nehru paid a tribute to the "outstanding" work done in defence science. He observed that shortly every student in the country would undergo a period with the National Cadet Corps.

The House passed the motion of thanks rejecting all amendments by a voice vote.

THE CENTRAL BUDGET

The Union Budget for the coming year indicates a revenue deficit of Rs. 60.6 crores at the present levels of taxation, and an overall deficit of Rs. 125 crores.

The Finance Minister, Shri Morarji Desai, who presented the budget to Parliament on Feb. 28, 1961, made some fresh taxation proposals which would bring in Rs. 60.87 crores for Central revenues. This will completely wipe out the revenue deficit and reduce the overall deficit to 64 crores which will be met by the expansion of treasury bills.

At current levels of taxation, revenue receipts for the coming year are placed at Rs. 962.92 crores and expenditure at Rs. 1,023.52 crores.

Defence spending in the current year was much less than 30 per cent of the total expenditure and continues to be so in the budget for the coming year in spite of an

increase of Rs. 16 crores, mainly due to the recommendations of the Pay Commission and expansion of some establishments.

The new tax proposals made by the Finance Minister are broadly under three heads. The changes in customs duties will yield an additional revenue of slightly over Rs. 29 crores, union excise duties almost an equal amount and minor changes in income tax and corporation tax about Rs. 3 crores.

Explaining his tax proposals, Shri Desai said taxation in a developing economy was an instrument of economic policy. It was no longer a question of just covering the revenue deficit from year to year. Resources could have to be raised for the plan as a whole. He said he had tried in framing his proposals to see that the burden did not fall very heavily on any one section of the community and that the incidence on lower income groups was very small. Also an objective of tax policies was to discourage imports and encourage exports and to discourage consumption and encourage investment.

During his speech, Shri Desai also referred to the 10 years of planned development marked by striking advances in almost all sectors of the economy. As the Second Plan draws to a close, it seems likely that the revised target of Rs. 4,500 crores in the outlay for the public sector would have been exceeded by Rs. 100 crores. Over the last 10 years, industrial output had gone up by 66 per cent and farm output by 33 per cent. During the Second Plan, the total additional taxation had been over Rs. 1,000 crores. While deficit financing would be much less than originally envisaged, private savings had been mobilised to the extent of Rs. 1,400 crores.

Shri Desai said the country would have to make greater efforts during the next plan. Surpluses from the various public enterprises should be available to finance the Plan. Development of this magnitude would call for sacrifices and a willingness to go without many things.

In a review of the economic conditions during the current year, Shri Desai said investment both private and public was on a high level, the rise in industrial output had been speeded up and the prospects of farm output were better for this year, though the previous year had been a bad season.

About prices which had almost persistently shown a rising trend in the Second Plan, Shri Desai said, the Third Plan had been drawn up with an eye to keeping stable the prices of essential goods entering into the common man's budget.

INDIAN RAILWAYS' PERFORMANCE

Replying to the three-day debate on the railway budget in the Rajya Sabha this week, Shri Jagjivan Ram said, the railways had carried out the task assigned to them in regard to the movement of coal. He would not however, be satisfied so long as there was a shortage of coal supply. The Railway Minister expressed the hope that more coal would be moved by July next.

The Minister said that as a result of reappraisal carried out by the Planning Commission in 1958 the Railways were expected to move 51 million tons of coal in the last year of the Second Plan. Of this, 7 million tons were meant for the steel factories and 43 million tons for the consumers including the railways. As for the steel plants, their present requirement of 7.5 million tons was being met in full. As for other consumers, the railways were carrying 42 million tons as required. The shortages at certain places were due to increased economic activity.

About the opening of new lines the Minister said the Planning Commission had been approached for additional funds. He added that the construction of new lines, would have to be related to the development of industry, minerals and agriculture in different areas.

The Railway Minister outlined the measures to provide more amenities for the passenger. Overcrowding in passenger trains had been reduced to a certain extent in some areas. But traffic was growing and to meet it more Janta trains would be introduced. He said that in the utilisation of wagons and other coaching stock, the Indian Railways compared favourably with the Railways in other advanced countries.

FACTS AND STATISTICS

One Wheat Zone: The Union Minister for Food and Agriculture, Shri S. K. Patil, has indicated that Government is considering whether there should not be one zone in the country for wheat. He said there was not only enough wheat but an abund-

ance of it. The States themselves wanted that the wheat zone should be extended, as otherwise there was no market for it.

Second Shipyard At Cochin: The Minister of State in the Ministry of Transport and Communication, Shri Raj Bahadur, said in the Lok Sabha that there was no truth in newspaper reports that the establishment of the proposed second shipyard at Cochin might not be possible during the Third Plan. Government was going ahead speedily and the project, which was estimated to cost about Rs. 20 crores, had been included in the draft Third Plan. The actual amount to be allotted for it in the Plan was now under examination. Land acquisition proceedings at the site of the shipyard were in progress. The lands were expected to be handed over to the project authorities during 1961-62.

Incentive Schemes: The total production at the Hindustan Machine Tools has registered an increase as a result of the introduction of the incentive schemes. As against 402 machines produced in 1957-58 the number produced in 1958-59 was 552 and in 1959-60, 702. Now five State undertakings have introduced the incentive bonus scheme. They are the Hindustan Machine Tools, the Hindustan Cables, the National Instruments, the Hindustan Antibiotics and the Piaga Tools Corporation.

Ordnance Factories: The total value of goods produced in the Ordnance Factories during the first 8 months of the current financial year is more than Rs. 17 crores. This represents an increase of approximately 20 per cent over the figure for the corresponding period of the previous year. It is expected that the total production for 1960-61 will be above Rs. 30 crores.

State Trading: The State Trading Corporation imported approximately Rs. 16.15 crores worth of goods and exported, Rs. 27.17 crores worth during the period April 1 to December 31, 1960.

Seizure of Gold: Gold and jewellery weighing about 1240.56 kilogrammes (or 106,353 tolas) and 10 sovereigns valued at Rs. 1,33.38,000 was seized by Customs, Land Customs and Central Excise authorities during 1960.

The taxes collected from companies during the period April 1 to December 31, 1960, totalled Rs. 90.48 crores.

The total direct taxes other than company taxes collected during the period were Rs. 79.26 crores.

The total customs and excise duties collected during the period were: customs Rs. 123.23 crores and excise Rs. 298.10 crores.

Additional Flights: The Indian Airlines Corporation incurred an expenditure of Rs. 45,595/- for operating 23 additional flights between Bombay and Bhavnagar during the recent Congress session. The income from the additional flights was Rs. 32,500.

Rest Houses: Twenty-five low-income group rest houses are being built at various tourist centres. Some of the centres where such houses are being built are: Amravati, Gauhati, Aurangabad, Khajuraho, Madurai, Trichy, Jog Falls, Brindavan, Puri, Bhubaneswar, Kulu, Nangal, Jaipur, Mt. Abu, Agra and Banaras.

The Japanese Method: The total area under the Japanese method of paddy cultivation during the last financial year was about 66.41 lakh acres. The estimated production was 73.05 lakh tons of paddy.

The Japanese Government have offered to send to India some groups of farmers to propagate the Japanese method of rice cultivation and the Government of India have accepted the offer. To begin with demonstration-cum-training farms on the Japanese method of rice cultivation was proposed to be introduced in four paddy growing districts preferably in the four package programme states. Later on, based on its success, the scheme might be extended to other rice growing states.

Cambay Oil Deposits: The exact estimate of oil deposits in the Cambay and Ankleshwar areas would be available only by the end of this year. The tests carried out so far have, however, revealed that there was enough deposit to sustain one refinery.

Women Teachers: The shortage of women teachers now felt in the country is likely to improve materially during the Third Plan. Government have planned special measures for this purpose. These include opening of new training institutions for women; attaching training sections to girls' secondary schools; giving financial assistance to girls from rural areas going

in for training and organisation of condensed courses for adult women.

Rail Link With Pakistan: No final decision has yet been taken on the question of a direct rail link with Pakistan. All aspects of the matter would be considered before Government makes up their mind, and the views of the West Bengal Government would also be taken into account.

Advertisements for Language Papers: There has been a tremendous increase in the number of language newspapers which received Government advertisements. The number of such papers had increased from 426 in 1954-55 to 961 in 1960. The number of language papers used for display advertisements rose from 291 to 688. Of the 961 papers, 75 per cent were small units with a circulation of between 1,000 and 10,000.

White Tigers: Further export of white tigers from India has been completely banned as a first step towards their preservation. The Union Government are in correspondence with the Maharaja of Rewa for the requisition of some white tigers for the Delhi Zoological Park for breeding purposes.

Home Affairs

(Continued from page 379)

been small. It was partly so due to the fact that while India had a reputation for fair dealing and financial rectitude, the capital exporting countries were still not sufficiently aware of the rapid industrial advancement and achievements in this country during the last decade. He said there were many claimants for foreign private capital and India's case should not go by default.

The purpose of the Centre is to induce freer flow of private foreign investment into India by bringing together Indian industrialists looking for foreign collaborators and foreign investors seeking Indian collaboration. It will not be enough of course just to supply information. The Centre will have to assist in developing an individual project into a 'prospectus' which can be examined at the technical and financial level by both the parties.

He that I am reading seems always to have the most force.—Montaigne



CRICKET

Ranji Trophy

Bombay will keep the Ranji Trophy again—for the twelfth time since its inception in 1934. They made the 44 runs needed to beat Rajasthan with seven wickets and two and a half days to spare at Udaipur on March 10, the third day of the five-day final.

Rajasthan 139 for three overnight, were all out for 249 in the first over after lunch leaving Bombay to complete the formalities before Polly Umrigar could receive the coveted trophy for the third year in succession. The final scores were: Bombay- 346 and 14 (for 3 wickets); Rajasthan—140 and 249.

HOCKEY

National Hockey Championships

The Railways won the Rangaswamy Cup, defeating Punjab by a solitary goal in the replayed final of the XXVth National Hockey Championship at Hyderabad on March 15. (National champions for three years from 1957 to 1959, the Railways had yielded to the Services last year.)

The match between the Services and Uttar Pradesh for the third place ended in a goalless draw two days earlier. The Uberoi Cup for the third place will, therefore, be shared between the two teams. Services won the toss on March 14, and thus they will keep the cup for the first six months. (Both the losing semi-finalists had last year reached the final, and the Services had ultimately emerged victorious.)

ATHLETICS

About 400 athletes, representing the cream of youth in the country, travelled to Jullundur to participate in the XXVth National athletics championships. Helped by ideal weather conditions and a firm track, the athletes, who represented 14 States and the Services, went on a record-breaking spree and by the time the bugler sounded the Last Post, marking the end of the championships on February 19, several Indian and Asian marks had vanished into

the mist of oblivion. In the meet 14 new Indian records were set up, four Asian records bettered, two Indian and Asian records equalled.

The following Asian records were bettered (In brackets are mentioned the old records.):

Men: Shot put—D. Irani (Maharashtra)—50 ft. 4 in. (49 ft. 4 in.); 50,000 metres walk—Zora Singh (Services)—4 h. 33 m. 18.6 s. (5 h. 44 m. 4 s.); 3,000 metres steep-chase—Pan Singh (Services)—9 m. 2.3 s. (9 m. 3.0 s.).

Women: 100 m.—Stephie D'Souza (Maharashtra)—12.2 s. (12.5 s.).

The following Asian records were equalled:

Men: 800 m.—Amrit Pal (Services)—1 m. 52.1 s. (1 m. 52.1 s.).

Women: 200 m.—Stephie D'Souza (Maharashtra)—25.3 s. (25.3 s.).

Medals Tally: Services won the largest number of medals in the National Athletic Championships. Gujarat, Bihar and Orissa failed to win any medal.

The following is the final medals tally:

	Gold	Silver	Bronze
Services	18	14	6
Maharashtra	13	4	4
Punjab	5	8	12
U.P.	5	3	5
West Bengal	4	13	8
Delhi	3	6	7
Mysore	3	2	3
Madras	2	1	5
Kerala	1	1	2
Rajasthan	0	1	2
Andhra	0	1	0
Madhya Pradesh	0	0	1

BOXING

World Heavyweight Title

With one crunching right Floyd Patterson kept his world heavyweight crown at Miami, Florida, on March 13 when he knocked out Ingemar Johanson in the sixth round of one of the most thrilling title bouts in history.

Patterson, 26-year-old Brooklyn-born Negro, and Johnson, 28, fought a total of

only 38 minutes and 39 seconds in their three fights. Patterson weighed 13 st. 12-3/4 lbs. and Johanson 14 st. 12½ lb.

RECORDS

World Indoor High Jump Record

Men: Valeri Brumel, the Soviet high-jumper, established a world's best indoor performance with a leap of seven feet 3½ inches at the Knights of Columbus Athletics meeting in New York on March 3.

This beat by half an inch the previous recognised best of seven feet, three inches held jointly by Brumel and John Thomas of the United States. Brumel jumped seven feet 4½ inches—the best ever by a high jumper—in Leningrad six weeks ago—but this was from a direct take-off.

Women: Tatyana Schelkanova, a Soviet student bettered her own women's world indoor best performance for the long jump on March 5 with a leap of 6.27 metres (20 ft. 6-3/4 in.).

Miss Schelkanova, competing in the Leningrad Winter Athletic Championships, improved by 10 centimetres (nearly 4 in.) her previous best performance made at Leningrad on March 3.

SPORTS INFORMATION

Indonesia's Offer to Gentle

Determined to put their best foot forward in the Asian Games Hockey Championship, Indonesia have made an offer to the great full-back, R. S. Gentle, India's famous Olympic player, to coach in that country for the next two years.

Some seasons ago Gentle had turned down a similar offer from New Zealand.

Offers to Sobers and Kanhai

Two-members of the West Indies touring side, all-rounder Garfield Sobers and batsman wicketkeeper Rohan Kanhai, have received offers to act as player coaches to two Australian clubs, according to tour manager, Gerry Gomez.

England-Australia Test Dates

Australian Team: Australia's cricket team to tour England this year was announced at Melbourne on February 16. The team is:

R. Benaud (Captain), B. Booth, P. Burge, A. K. Davidson, R. Gaunt, W. Grout, R. N. Harvey, B. Jarman, L. Kline, W. Lawry, C. C. McDonald, K. Mackay,

G. McKenzie, F. Mission, N. O'Neill, R. B. Simpson and I. Quick.

Nineteen-year-old Graham McKenzie is a new fast bowling "hope." The choice of McKenzie, the "baby" of the side and unknown before this season, is one of several bold moves made by Sir Donald Bradman and co-selectors.

Test Itinerary: The five-Test series between England and Australia this summer will commence with the first Test at Edgbaston. All the games start on Thursday.

The Test dates are as follows:

First Test—at Edgbaston, June 8 to June 13.

Second Test—at Lord's, June 22 to June 27.

Third Test—at Leeds, July 6 to July 11.

Fourth Test—at Olds Trafford, July 27 to August 1.

Fifth Test—at the Oval, August 17 to August 22.

England beat Australia in the 1956 series in England by two matches to one, with two drawn. Australia regained the Ashes in 1955-59, winning four Test and drawing one.

Cricket—not for U.S.S.R.

The Russian ambassador to Australia, Mr. Ivan Kurdiukov who saw his first cricket match on February 18, is not convinced that adoption of the game by America and Russia would solve many international problems.

"Cricket is very interesting—but very peculiar," Mr. Kurdiukov said after watching the West Indies tie with a team chosen by Mr. Robert Menzies, the Australian Prime Minister.

Commenting on Mr. Menzies' suggestion that world problems would be eased by both America and Russia taking up cricket, the ambassador said he thought cricket would never be popular in Russia.

"Perhaps there is something special about cricket," he admitted, "but it is difficult for me to see it."

Milkha Singh Resigns from Army

India's Olympic sprinter, Milkha Singh, has resigned from the Army.

Milkha Singh, who joined the Army as a soldier in 1953 was promoted to the rank of Jemadar recently.

Oldest Olympic Title-Holder

Who is the oldest living Olympic winner?

He is Englishman Dick Gunn, who won the featherweight boxing title at the Olympic Games held in London in 1904, and celebrated his 90th birthday in London in the second week of February, 1961.

Gunn won the national amateur 126-pound title twice and held it at the time he decided to retire in 1896. He came out of retirement a few years later, however, to win the Olympic gold medal at the age of 37.

Benaud's 50th Test

The fifth Test between Australia and the West Indies at Melbourne was Australian captain Richie Benaud's 50th Test.

Still only 30 years of age, Benaud has played in 18 Tests against England, 10 against the West Indies, nine against South Africa, eight against India and four against Pakistan.

Benaud has attained this record even though he must rank as one of the world's most injured players. In 1948 he suffered a fractured skull when hit on the head by a ball. The following season he broke a finger. In 1953 a mighty square cut by South Africa's Waite smashed his mouth. He twice fractured fingers in England, and again last September in South Africa. During the present series against the West Indies he dislocated a finger in November, and sprained his left wrist in January during the third Test in Sydney.

A slow spin bowler, he has taken 204 wickets in Tests up to the end of the Melbourne fifth Test against the West Indies. Only three other bowlers—England's Alec Bedser (236), and Australia's Ray Lindwall (228) and Claiie Grimmet (216),—have taken more wickets in Test matches.

As a Test batsman he has scored 1,612 runs in 66 innings, including the fastest century for an Australian in a Test—he reached three figures in 78 minutes in the fifth Test against the West Indies at Kingston in 1955.

As a captain he never lets up—he is always assisting and encouraging his players, especially when prospects look grim. He mixes easily with his team mates and relies more on good example to gain the confid-

ence and respect of his team than on laying down orders.

World T-T Seedings

Japan's Kimiyo Matsuzaki is seeded No. 1 in the women's singles of the World Table-tennis Championships to be staged at Peking from April 5 to 14.

With her compatriot, Kazuko Itoh, Kimiyo also heads the doubles list.

Jung Kuo-tuan, of China, the defending champion, is top seed in the men's singles.

Ichiro Ogimura and Teruo Murakami of Japan, head the men's doubles.

Cricket World Series

According to NAFEN, there was much agitation in Sydney among Australian cricket fans for a "world series" cricket championship.

Australian cricket enthusiasts state that at the present time international cricket is restricted to Test series between the various playing countries—but at no time is there a recognized championship country.

The most regular Test series are those between Australia and England, and between India and Pakistan. But matches between India and Australia and Pakistan and Australia are at irregular intervals.

Some "world series" enthusiasts state that all the matches should be played in Australia—but the general feeling is that the matches should be staged around the world.

A cricket fan stated that the series could start in Australia (or any of the other southern hemisphere playing countries) early in January, for instance, then move to New Zealand and South Africa, then to England, across to the West Indies, then, after a series of matches in India, Pakistan and Ceylon the series could wind up for the year at Melbourne's giant cricket ground during the last week in December.

This final Test would be between the world's two best cricket teams of the year.

The series of matches in England or India or any other country could be played between three or four nations and could involve any number of matches.

A cricket "world series" would mean that during the cricket season of every cricketing country a series of international matches would be played every year.

Appointments, Awards etc.

APPOINTMENTS

Mr. Jean Paul Garnier (57) was appointed Ambassador of France to India on February 15.

Dr. Imkongliba Ao, President of the Naga People's Convention, was elected on February 17 as the Chairman of the Nagaland's interim body, inaugurated on February 18.

Mr. Justice M. C. Desai was sworn in as Chief Justice of the Allahabad High Court on February 17.

A seven man Cabinet, headed by **Mr. Binodanand Jha**, was sworn in in Poona by the Governor, **Dr. Zakir Hussain** on February 18.

Dr. Daulat Singh Kothari was appointed Chairman of the University Grants Commission on February 25, in succession to the late **Dr. V. S. Krishna**.

Crown Prince **Moulay Hassan** of Morocco was invested on the night of February 23 as King, in succession to his father, **King Mohammed V**.

Master Tara Singh was re-elected on March 3 as President of the Shiromani Akali Dal. On March 10, he was re-elected President of S.G.P.C.

Italian career diplomat **Alberio Casardi** was appointed on March 7 as acting Secretary-General of the NATO, pending the appointment of a successor to **Mr. Paul Henri Spaak**.

Mr. Klas Book was appointed Ambassador of Sweden in India on March 10.

Mr. Veli Arthur Heleri was appointed Ambassador of Finland in India on March 10.

The Shah of Iran reappointed on March 11, **Mr. Jafar Sharif Emami**, as Prime Minister of Iran.

The Sultan of Zanzibar, **Seyyid Sir Abdullah Bin Khalifha**, proclaimed his eldest son, **Prince Seyyid Jamshid**, heir to the throne on March 15.

Dr. Raja Ramanna, head of the nuclear physics division of the Atomic Energy Establishment at Trombay, was appointed Chairman of the Managing Committee on Norway's new nuclear reactor "nora" on March 14.

RESIGNATIONS ETC.

Dr. Hare Krushna Mehtab resigned

from the leadership of the Orissa Legislature Congress Party on February 16. The resignation of the Congress-Gantantra Parishad coalition Cabinet was submitted to the Governor on February 21.

The resignation of **Mr. A. K. Brohi**, Pak High Commissioner in India, was accepted by the Pakistan Government on February 23. He leaves for Pakistan on March 31.

AWARDS

UNESCO announced in Paris on March 9 **Mr. Ritchie Calder**, well-known British science writer and professor of international relations at Edinburgh University, as the winner of the **1961 International Kalinga Prize** for the popularization of science. He is the ninth person to win the £1,000 prize, which is donated by an Indian industrialist **B. Patnaik** and offered by the Kalinga Foundation annually.

The International Organisation of Journalists awarded on March 9 its **1960 International Prize for Journalism** to **Mr. Brian Bunting**, Editor of the banned left-wing South African weekly "New Age", and the editors of the Cuban daily newspaper, "Revolucion."

VISITORS

The first Deputy Prime Minister of Russia, **Mr. Alexi Kosygin** and his wife, arrived in New Delhi on February 20 for a 12 day visit to the country.

Lord Attlee, former Prime Minister of Britain, arrived in New Delhi on February 21, to deliver the Azad Memorial lectures during his one-week stay in the capital.

Air Chief Marshal S. Suryadarma, Chief of Staff of the Indonesian Air Force, arrived in New Delhi on February 22, on a 10-day visit to India.

Maj.-Gen. H. W. G. Wijeyekoon, Ceylon Army Commander, accompanied by Mrs. Wijeyekoon, arrived in New Delhi on February 25 on a 15-day visit.

The Earl of Home, British Foreign Secretary and Lady Home, arrived in New Delhi on February 25 on their way to Kathmandu.

A technical mission of the World Bank arrived in Delhi on March 12 to study the development of Indian railways.

Mr. Averell Harriman, U.S. Ambassador-at-large, arrived in New Delhi on March

(Continued on page 392)

NEWS Diary



FEBRUARY

12. An eight-man Wisconsin University expedition arrived at the South Pole

13. It was announced in Elisabethville that the former Congolese Prime Minister, Mr Patrice Lumumba and two of his aides, Joseph Okito and Maurice Mpolo, were killed by the inhabitants of a small village in Katanga

14. Russia called for the removal of Mr Dag Hammarskjöld from the post of UN Secretary-General and ceased to recognise him because of the international crime of the Lumumba murder. But Mr Dag rejected the demand the following day

Mr Nehru presented to Lok Sabha the 600-page report of the Sino-Indian officials on the boundary question which started in June last year. During the border talks between the officials of the two countries, Peking produced a map to raise its earlier claim of 48,000 square miles to 50,000 square miles of Indian land. (China is already in occupation of 12,000 square miles of Indian lands)

15. India made it clear to Pakistan that any decision reached between Pakistan and China on the Sino-Indian border dispute, would not be acceptable to this country

The Railway Budget for 1961-62 was presented to the Lok Sabha by Mr Jagjivan Ram, the Railway Minister. The Budget showed a net revenue surplus of Rs 364 crores

The Government of Bhutan requested the Indian Government 'to negotiate or take up any question with China' regarding the northern borders of that country

The Government of India and the Government of Uruguay decided to establish diplomatic relations at legation level

16. Morocco, Indonesia and Cuba decided to recognise the pro-Lumumba Government in Stanleyville as the legal Government of Congo

All Belgian nationals in Ghana faced expulsion as the result of Mr Lumumba's death.

17. The Government of India lodged a strong protest with Peking against two recent violations of the Indian air space by Chinese aircraft, one of which took place in Sikkim and the other in UP

18. The Governor of Assam, General Sinagesh inaugurated the interim set-up of Nagaland at Kohima. The new State itself will come into being when Parliament passes the Bill amending the Constitution

19. Discoverer XXI, launched on February 18 from Vandenberg Air Force Base, California, was today put into orbit

King Mahendra reshuffled portfolios of all the five Ministers and took over the Defence portfolio himself

20. The Lok Sabha passed the Double-Member Constituencies (Abolition) Bill

21. Mr Moise Tshombe ordered general mobilization of all Katangans, including whites

The Security Council adopted the major Afro-Asian resolution calling for the use of force if necessary in the last resort to prevent civil war in the Congo, but it failed to pass a second Afro-Asian resolution strongly condemning unlawful arrests, deportations and assassinations

The Second Soviet credit of Rs 60 crores for the Third Plan was signed in New Delhi

22. Mr Rachpal Singh, former dictator of the Akali Agitation in Delhi, surrendered to the police

Five Northern Rhodesia Ministers resigned in protest against Britain's new constitutional proposals which would increase African representation

France fired its first animal-carrying rocket at Colomb Bechar (Sahara). It was a Veronique rocket with a rat (Hector) in the nose cone

The Orissa Legislative Assembly was prorogued by the Governor, Mr Y. N. Sukthankar.

23. The Indian Council for Cultural Relations admitted Lord Attlee and six Indians as honorary fellows of the Council.

24. The Socialist no-confidence motion against the Gupta Ministry was lost in the U.P. Vidhan Sabha by 91 votes to 288.

25. President Rajendra Prasad dissolved the Orissa Assembly and assumed all the functions of the State Government under Article 356 of the Constitution. The Lok Sabha approved the introduction of President's rule in Orissa on March 9.

Nearly 2,000 anti-Indian demonstrators stoned the Indian High Commission in Karachi as a protest against the Jabalpur incident. The Government of Pakistan accepted on March 2, India's demand for "restitution and compensation" for the damage done to the Indian Chancery building.

Belgium snapped the diplomatic relations with the U.A.R.

The South Korea Justice Ministry announced seven years' suspension of civil rights for ousted President Syngman Rhee and 600 of his top supporters.

Mr. Lumumba was proclaimed "Saint of the Church of Africa".

Expansion of the present 10-man Mysore Cabinet to 14 was announced. The new members are: Mr. H. K. Veeranna Gowdh, Mr. H. S. Rudrappa, Mr. B. Vaikanta Baliga and Mr. Veerendra Patil, who were Ministers in the Nijalingappa Cabinet.

27. Mr. Nehru expressed disagreement with Soviet suggestions for any change in the post of the Secretary-General of the U.N.

The Nangal Fertiliser Factory went into production. This Rs. 30-crore project is the second fertiliser factory, in the public sector, Sindri being the first.

Pakistan accepted Kashmir's right to use the waters of the three western rivers in the Indus basin.

28. The Union Finance Minister, Mr. Morarji Desai, presented the Budget to the Parliament.

Tunisian soldiers of the U.N. Congo forces refused to take up positions against Maj.-Gen. Mobutu's troops in Leopoldville.

MARCH

1. Mr. Girdhari Lal was sworn in as a Cabinet Minister in U.P.

Prime Minister Nehru and Sant Fateh Singh met again in New Delhi to discuss the Punjabi Suba issue.

2. The Soviet sputnik VII, launched on February 4, burnt up.

Attempt at suicide, ceased to be a punishable offence in England.

3. The Equateur provincial Government in Congo agreed to have the U.N. force reorganise or control Congolese troops who have disrupted the life of the province.

4. It was confirmed that India would send three battalions of combat troops to the Congo, under Brigadier K. A. S. Raja.

Congolese troops forced U.N. Sudanese soldiers to withdraw from the naval base of Banana at the mouth of the Congo river.

The Indian Navy's first air-craft-carrier—"Vikrant"—was formally commissioned at Belfast, Ireland.

Mr. Manubhai Shah inaugurated the first alarm clock factory at Ghaziabad, set up with Japanese collaboration.

6. West German Economics Minister announced the upward revaluation of the mark by "about 4.75 per cent".

It was announced in Shillong that rich deposits of coal were discovered in Subansiri division of NEFA.

7. The stage of emergency, decreed on February 14 in the Federation of Rhodesia and Nyasaland, ended today.

8. The tenth Commonwealth Prime Minister's Conference opened at Lancaster House in London.

The 17th Session of the U.N. Economic Commission for Asia and Far East (ECAFE), was inaugurated in New Delhi by President Dr. Rajendra Prasad.

9. The Dalai Lama appealed to the members of the U.N. to get the Chinese to vacate their aggression in Tibet.

Russia recovered a spaceship after sending it into orbit round the earth with a dog Cheernushka (Blackie) on board.

An Agreement was signed in New Delhi between U.S.A. and India under which India would get 300,000 bales of American cotton.

The Congolese Government sent a seven point telegram to the U.N. Secretary-General, threatening to break off all relations with the U.N. unless Mr. Rajeshwar Daya was withdrawn.

11. The repatriation for withdrawal of

Moroccan troops from the Congo was completed.

12. Four young mountaineers successfully climbed the north face of the 13,000-foot Eiger mountain for the first time in winter.

The round-table conference of Congolese leaders in Tananarive created a confederation of States in the Congo, with Mr. Joseph Kasavubu as the Confederation President.

13. It was announced in New Delhi that according to a report from Sikkim Chinese troops intruded into Indian territory, on March 10, about a mile south of Nathu-la (14,000 ft.) which marks the border between Sikkim and Tibet.

The Island Republic of Cyprus was admitted as the 12th full member of the Commonwealth Countries.

Guinea nationalised its gold and diamond industries.

14. Mr. C. B. Gupta, Chief Minister of U.P., was declared elected to the U.P. Vidhan Sabha from the Ranikhet (south) constituency.

Mr. Krishna Menon said in the Lok Sabha that an Indian patrol had captured a Chinese soldier at Kupup, four miles in south Sikkim near Tibet and 14 miles east of Gangtok.

The Pakistan Government issued an order barring Pakistanis engaged or married to foreigners from Government jobs.

The first batch of Indian combat troops left for Leopoldville on their mission of peace in the Congo.

The Nepal Government armed itself with powers to summon home any Nepali citizen abroad on pain of confiscation of property.

Oil was struck in well No. 8 in Digas village in the Ankleshwar area.

15. The South African Prime Minister, Hendrik Verwoerd, withdrew his application for South Africa's continued membership of the Commonwealth as a republic.

All Belgian-owned estates in north Sumatra were seized by the Indonesian Army.

The Senegal Republic recognized People's China and the Democratic Republic of Vietnam (North Vietnam).

Appointments, Awards etc.

(Continued from page 389)

15 to discuss Asia's economic development with ECAFE delegates and meet the leaders of the Government of India.

OBITUARY

Dr. V.S. Krishna (58), Chairman of the University Grants Commission, died in New Delhi on February 16 of a heart attack.

Mr. Uma Charan Patnaik (59), independent member of the Lok Sabha from Orissa, died in New Delhi on February 18.

Lieutenant Ram Charan, a staff officer in the Education Directorate of Naval Headquarters, died in a road accident in New Delhi on February 20. Lieutenant Ram Charan was the first Indian to visit Antarctica.

The sitting member of the Rajya Sabha from Jammu and Kashmir, **Syed Mohammed Shah Jalali** (65), died in Srinagar on February 21.

King Mohammed V of Morocco died in Rabat on February 26.

Mr. Govind Malaviya (59), a sitting member of the Lok Sabha, died in New Delhi on February 27.

George Formby, one of Britain's most popular comedians, died in Preston on March 7.

Pandit Govind Ballabh Pant (73), Home Minister of the Union of India since January 3, 1955, died in New Delhi on March 7, a fortnight after he was stricken by an attack of cerebral thrombosis.

Sir Thomas Beecham (81), conductor and composer, died in London on March 8.

Mr. K. Rama Rao, former Editor of the "National Herald" of Lucknow and the "Searchlight" of Patna, died in Patna on March 9.

Prof. Luigi Duranti (76), a radiologist of international reputation, died in Pisa on March 12.

Mr. Ram Kripal Singh (69), a member of the Rajya Sabha, died in New Delhi on March 14.

Mr. Chen Chiyeh (81), a member of the National Assembly and one of the revolutionary leaders who overthrew the Manchu Dynasty, died after a long illness at Taipei on March 15.

MAY 1961

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WINNER OF Rs. 7,500 PRIZE

Shri Laxmi Narain of Teliwara, Delhi won the first prize of Rs. 7,500 on a Prize Bond of Rs. 5 in the second draw held on 1st December, 1960.

Buy Government of India Prize Bonds and take YOUR CHANCE TO WIN A PRIZE. Your principal will be returned intact on 1st April, 1965.

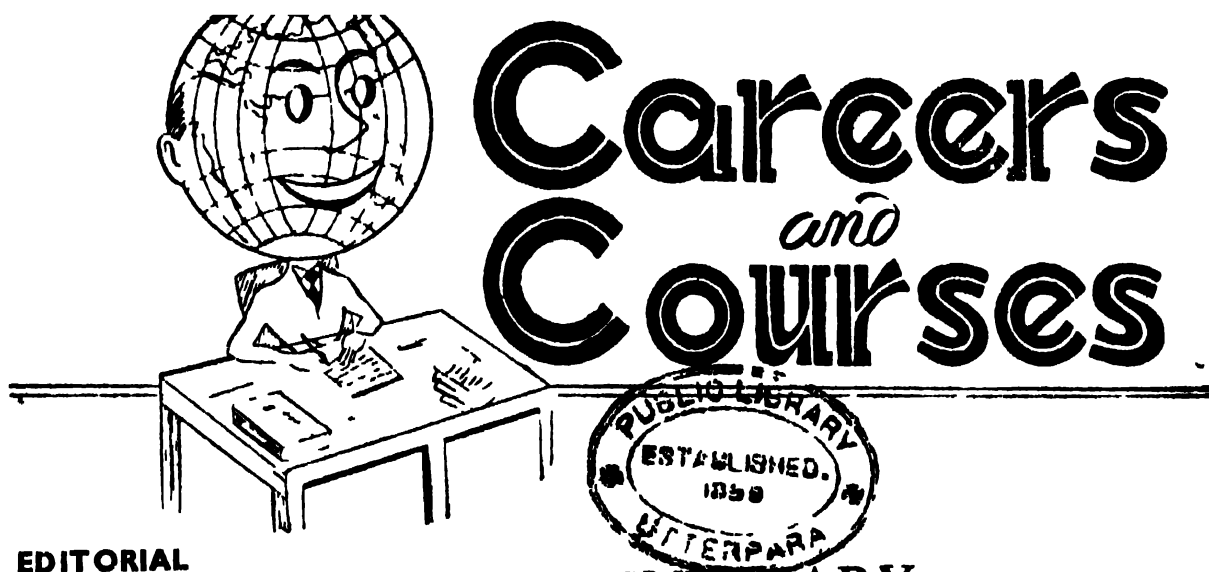


GOVERNMENT OF INDIA PRIZE BONDS 1965

Bonds sold up to 30th June, 1961 will participate in the draw due on 1st September, 1961 and every quarter thereafter until 1st March, 1965.



**NATIONAL SAVINGS
ORGANIZATION**



EDITORIAL

TAGORE CENTENARY

India has marked the current year, 1961, for celebrating the birth centenary of one of her greatest sons, Rabindranath Tagore. A year-long country-wide programme of cultural and literary activities has been chalked out to pay homage to the versatile genius and memory of the great Indian poet, writer and philosopher. The Government of India has declared Monday, May 8, 1961 as a public holiday. Memorial Theatres are being built in every State with Central assistance. Twenty theatre groups throughout the country have been sanctioned Rs. 1½ lakhs by the Union Ministry of Scientific Research and Cultural Affairs for the production of new plays. To commemorate the birth centenary of Tagore these theatre groups will stage the Poet's various plays including "Chitra Kumar Sabha" in Kannada and Oriya, "Shesh Raksha", "Malini" and "Tapati" in Bengali; "Bisaijan" in Manipuri; "Dak Ghar" in Punjabi; "Khela Ghar" in Assamese and "Chitra" in Malayalam. On May 7, Prime Minister Nehru will open Rabindra Bhavan in New Delhi. This Bhavan is built at a huge cost and it shall be the permanent home of the three Indian Akademies—the Lalit Kala Akademi, the Natak Akademi and the Sahitya Akademi. Besides the Bhavan, an open-air theatre, capable of accommodating 1,100 people, would be built in Delhi. Similar theatres would come up in all the State Capitals of India.

The Lalit Kala (Fine Arts) Akademi would bring out an album of reproduction of 40 of Tagore's paintings. The Sahitya (Literature) Akademi would publish the selected works of Tagore in all Indian

languages. The Sahitya Akademi is also planning to bring out a volume of translations of Tagore's writings for children in all major languages. There would also be an edition of 18 of Tagore's essays in a book to be called "Towards Universal Man"—to be translated in all languages and published simultaneously in India, London and New York.

On May 8, Tagore's ancestral home in India will be declared a national monument. The two places in East Pakistan, where Tagore lived, will also be declared national monuments.

An international seminar from November 11 to 19, 1961, will be organised jointly by the Sahitya Akademi and the Indian Council of Cultural Relations in New Delhi in connection with Tagore Centenary celebrations.

A documentary film on Tagore's life, directed by Satyajit Ray, will also be released in India and abroad during the centenary celebration week in early May.

Reports of elaborate preparations for Tagore Centenary Celebrations have been received from various parts of the world. Of special interest are programmes being planned in Russia, United States, Britain, UAR, Italy, Nepal, Holland and other Asian and European countries.

An All-Union Tagore Centenary Committee was set up in Moscow on Oct. 17, 1960, to draw up a comprehensive programme for the centenary celebrations in the USSR. A 12-volume edition of Tagore's collected works is being prepared. Tagore's works will be published in many languages of the peoples of the Soviet Union. It is

planned to hold a competition among verse translators for the best translation of Tagore's poetry. A biography of Tagore will be published in one edition of 100,000 copies. Two documentaries about the life and work of Tagore will be released throughout the Soviet Union. These films include stills of Tagore's visit to Russia in 1930 as well as a number of shots taken in India. The Soviet Ministry of Communications will be issuing a six-kopeck stamp with a portrait of Tagore designed by the young artist Yuri Lukyanov, and the Government will also produce a bronze centenary medal. Tagore's works and dramas are very popular in the Soviet Union. In 1955-57 an 8-volume edition of the selected works of Tagore translated from Bengali into the Russian language was published in Moscow. Russian versions of "The Sacrifice", "Daughter of the Ganges" (stage adaptation of the novel "The Wreck") and "Chitra" have been successfully performed on the Soviet stage. Tagore's works have been published in the Soviet Union about 180 times, in editions of more than three and a half million copies, in 18 languages of the Soviet people.

The United States is also making brisk preparations to celebrate the Centenary of Tagore in a befitting manner during the first week of May 1961. The Mayor of Los Angeles, Mr. Norres Poulson, has appealed to the citizens of Los Angeles to celebrate the Centenary and has designed the first week of May as "Rabindranath Tagore Week". Plans for a year-long series of commemoration observances have been worked out in Philadelphia, New York, Chicago, Boston and other prominent cities. The celebrations include lectures and discussions on the life and works of Tagore and presentation of English rendering of his plays.

Britain's Tagore centenary celebration committee—of which Mr. Harold Macmillan, the Prime Minister, is a patron and Mrs. Vijaya Lakshmi Pandit, India's High Commissioner, is president—plans a Tagore meeting and concert on May 8 in London's largest hall, the Royal Albert. The programme will include Indian music and songs by Mrs. Rajeswari Dutta, who is going to London from India specially for the celebrations.

Rabindranath Tagore was born on Tuesday, May 7, 1861, at Jorasanko, the family residence in Calcutta, the youngest

of seven sons of Debendranath Tagore, a Pirali Brahmin. (Tagore, or Thakur, is really not a name, but a title of nobility). Rabindranath's grandfather, Dwarkanath, a wealthy merchant and philanthropist, and one of the first Bengalis to visit England, was a friend of Raja Ram Mohan Roy, with whom he associated in forming Adi Brahmo Samaj, a movement for religious reform. Rabindranath's father, Debendranath, known as the Maharshi or the great sage, was a remarkable and deeply religious man who exercised a profound influence on Rabindranath. At the age of 8, Rabindranath joined the Calcutta Normal School and two years later he was admitted to the Bengal Academy. His progress not being satisfactory at any of the schools he attended, his education was supplemented by tutors at home. He also received regular lessons from his father in Sanskrit, English and rudiments of Astronomy. His mother died of tuberculosis when he was thirteen. On September 20, 1878, he sailed for England with his elder brother, Satyendranath, I.C.S. (the first Indian member of that service). In England, Rabindranath joined a school in Brighton and later attended classes at University College, London, to study English literature. He was preparing to study law when in 1880 he returned to India, without completing any course of study. On Dec. 9, 1883, Rabindranath married Mrinalini Devi. By this time, he had already published a good deal in Bengali; his first work, a long narrative poem **Banaphul** (Wild Flower) was published in 1876 in a Bengali magazine, **Jnanankur**. His first book, a narrative poem called **Kabikahini** (Poet's Tale) appeared in 1878. In 1884, he went to Shiladia on the banks of the Ganges to manage his father's estate. There he came into touch with the real life of the people and wrote poems, tales, parables, and dramas dealing with their everyday problems. This second or Shiladia period of his life, which lasted 17 years, had a sad ending as he lost in rapid succession by death, his wife, his daughter and the younger of his two sons. In 1881, Rabindranath composed his first song-drama, **Balmiki Pratibha** (The Genius of Balmiki). Four years later he wrote **Pra-kritir Pratishodh**, in which he dispensed with music. Both these dramas were performed at the private theatre of the Tagore family at Jorasanko, as it was an era of wealthy private theatres. A drama can be

judged only by dramatic tests, for no play is complete until it has been performed. Tagore had his own stage to test them on. The Poet's home was one of the centres of the artistic and intellectual life of the day (His elder brother, Jyotirindranath, was a well-known dramatist who had written 32 plays of his own). Tagore often took part in the performance of his own plays. In 1890, he wrote his famous play, **Bisarjan** (Sacrifice), which was staged at the family residence at Jorasanko, the Poet taking the part of Raghupati, the main character. Tagore never hesitated to revise or rewrite his work and many versions of his plays exist.

The last quarter of the nineteenth century was full of intellectual ferment. Religious and social reform occupied the best minds. Political unrest, combined with a growing nationalism, fostered revolt against all that was oppressive, constricting or authoritarian. The theatre was intimately associated with this stimulating activity but the passage of the Dramatic Performances Act in 1876 had checked its growth. Tagore definitely used the drama as an instrument of social and religious change. He left the spectator in no doubt as to where his sympathies lay. His attitude to society was critical and he was quick to perceive folly. His characters represented the ideas and the ideals, in the conflict of which he saw drama. Tagore's versatility, both in technique and subject matter, was extraordinary. He wrote all kinds of plays—mystery, moral, history, romantic, realistic, tragic, comic, song and dance dramas. Vulgarity was repulsive to him. He absorbed all the influences, Eastern and Western, that came his way and made something out of them which is entirely his own creation. Generally speaking, love interest is minor in Tagore's plays but he succeeds in rousing and holding the interest of the audience remarkably well without it. Tagore is first and last a poet and all his drama is poetic drama. His historical plays and tragedies are, for the most part, in blank verse. **Dak Ghar** is in prose. His famous dramatic works are: **Raja-O-Rani**, **Bisarjan**, **Malini**, **Natir Puja**, **Chandalika**, **Shyama**, **Chitrangada**, **Arup Ratan** (a later version of **Raja**), **Rakta Karabi**, **Mukta Dhara**, **Shesh Raksha** (a comedy of errors written without music), **Chirakumar Sabha** (subject being a bachelors' club), **Phalguni**, **Saradotsav** etc. etc.

Tagore's creative activity was almost entirely through the medium of his own

language, Bengali. He used English mainly as a medium for international communication. He translated much of his own work into English, and occasionally wrote directly in English. Tagore was above all a poet, even in his plays and novels and short stories. He wrote 100,000 lines of poetry (as against Milton's 18,000). The full flavour of his work cannot be understood except by reading it in his native tongue.

Tagore was not generally known outside India until 1912, when the first English translation of his poetry appeared.

Tagore received the Nobel Prize for literature in 1913. He was at the time on a lecture tour in the United States and Harriet Monroe had published the collection of his poems in English, by the name of **Gitanjali** or Song Offering. The poet composed the original songs in Bengali in 1910 and later translated them into English. Perhaps no other author has been so prolific as Tagore. He produced an immense volume of songs, for which he frequently composed the music also; these songs are widely sung in Bengal. He introduced many new types of metre, thereby greatly enriching Bengali poetry, and also experimented in prose, and broke away from the formal Sanskrit style admired in the nineteenth century, to become a pioneer in modern Bengali prose writing. An all-round genius, Tagore took up painting at the age of 68 and exhibited in Moscow, Berlin, Munich, Paris, Birmingham and New York. He was also a composer and wrote and set to music over 3,000 songs. His publications included about 60 political works, as well as numerous works in prose, including novels, short stories, essays, sermons, dramas etc. His famous writings include: **Gitanjali** (Songs) 1912; the **Crescent Moon** (Poems) 1913; the **Gardner** (Poems) 1913; **Sadhana: The Realisation of Life**, 1914; **Fruit Gathering** 1916; **The Hungry Stones and other Stories**, 1916; **Stray Birds**, 1916; **My Reminiscences**, 1917; **Nationalism**, 1917; **Dover's Gift**, 1918; **Parrot's Training**, 1918; **Stories from Tagore**, 1918; **The Home and the World** (Novel), 1919; the **Fugitive**, 1921; **Glimpses of Bengal**, 1921; **Thought Relics**, 1921; the **Wreck** (Novel) 1921, **Creative Unity**, 1922; **Poems**, 1923; **Greater India**, 1923; **The Eyesore**, 1924; **Letters from Abroad**, 1924; **Broken Ties and other Stories**, 1925; **Fireflies**, 1928; **Letters to a Friend**, **Songs**, 1932; **Collected Poems and Plays**, 1936.

On June 3, 1915, Tagore was knighted. Four years later he surrendered the title in protest against the Jalianwala Bagh Massacre at Amritsar (April 13, 1919) and Martial Law atrocities in the Punjab, but in later years permitted it to be used again. He received honorary doctorates from four Indian Universities, and in 1940 Oxford gave him a Litt. D. degree **in absentia**.

Tagore made 11 foreign tours, the last at the age of 69. He visited most of the countries of Europe, also America, China and Japan, lecturing and everywhere receiving great ovations. He also travelled all over India. In 1930, Tagore delivered the Hilbert Lectures at Oxford.

Tagore's work for education has its finest memorial in the institution at Santiniketan, near Bolpur, where a liberal school education is given. This institution, Visva-Bharati, was founded in 1901. Tagore donated his entire Nobel Prize and all the proceeds of his lectures to the school at Santiniketan. The interest of education was closest to his heart. Tagore's ambition was to found an international university for the study of different cultures and religions of the world and to create "that natural sympathy, understanding and tolerance on which alone can the unity of mankind rest". To this end Visva-Bharati was established as a seat of international learning and culture. Tagore had many dreams. One of them was that India should once again become, as it has always been in the best periods of its history, a meeting place of the cultures of the East and the West. . . a meeting place in the creative sense of the word, where each culture while maintaining its individuality learns to appreciate and assimilate, where possible, the best in others. The highest education, according to Tagore, is that which does not merely give us information but makes our life in harmony with all existence. Explaining the aims and objects of Visva-Bharati, Tagore said: "Its one object is to let India welcome the world to its heart. Let what seems a barrier become a path; and let us unite, not in spite of our differences, but through them. For differences can never be wiped away, and life would be so much the poorer without them. Let all human races keep their personalities, and yet come together, not in a uniformity that is dead, but in a unity that is living."

Tagore was an ardent nationalist, though he condemned the methods em-

ployed by some of his extremist fellow-countrymen. A "universal humanitarian" with a strongly mystical tinge, his desire for the social welfare of India was sometimes complicated with the more aggressively political demands of the Nationalists under Mahatma Gandhi. He desired that social reform should precede the political freedom. He wrote: "Nationalism is a great menace. . . It is my conviction that what India most needed is constructive work coming from within herself. . . We must show those who are over us that we have in ourselves the strength of moral power, the power to suffer for truth. . . Political freedom does not mean real freedom, it is only gain of power."

Tagore loved his country as a true patriot. He composed and sang the opening song at the second session of the Indian National Congress in Calcutta in 1886. He protested against the repressive policy of the Government, particularly in arresting Balgangadhar Tilak, in 1898. He vigorously supported the movement for honouring the memory of Shivaji during 1904, when he wrote his famous poem "Shivaji Utsav" which he read at the Calcutta Town Hall. Tagore took an effective part in the agitation which swept over Bengal consequent on Lord Curzon's decision to bisect Bengal in 1905. Gandhiji called him "Gurudev" and held him in great esteem and affection.

Tagore's song **Jana-gana-mana** was adopted as the National Anthem of India on Jan. 24, 1950. The song was first sung on Dec. 27, 1911, during the Indian National Congress Session at Calcutta. It was first published in Jan. 1912 under the title **Bharat Vidhata** in the **Tattwabodhini Patrika**, of which Tagore himself was the editor. The poet translated it into English in 1919 under the title **Morning Song of India**.

Tagore died on 7th August, 1941, leaving behind him a vast treasure of his literary and artistic works which are avidly read throughout the world. To the memory of this great humanist, a great poet, educationist and philosopher, we are paying homage on his hundredth birthday. The world is richer by the cultural legacy which he left and his name and writings shall ever inspire the coming generations. The moral purity and the lofty ideals which he preached shall be a guiding star to the humanity.

How To Study To Pass Examinations

By MARJORIE BOULTON, M. A.

Examinations are not the most important tests life presents. For example, it is much harder to learn to love, to bring up a child, to keep one's mind alert in middle age, or to be sincere than to pass an examination.

But examinations are a necessary hurdle in most worthwhile careers—and many students dread them. In facing examinations, as in facing most of the tests life lays before human beings, we are helped by:

Foresight; Persistence; Knowledge of psychology; Use of all resources; Sense of purpose; System; Wise management of time; Courage, and Enthusiasm.

These are fine words, but only words. What do they mean in practice? Let us examine the nine helpful attitudes or habits, one by one.

1. **Foresight:** About the worst possible approach to examinations is the very common one adopted by inexperienced students: to waste a great deal of time at the beginning of the course; to put off difficult tasks as long as possible; and to rely on frantic, fevered, sleepless last-week, or even last-night, cramming just before the examination.

At worst, the result is a failure or a breakdown. But even if the student is bright enough and lucky enough to pass using belated cramming as the chief method, he or she will be under the strains of half-suppressed built feelings throughout the course and of gross overwork towards the end. This is inevitably bad for nerves, health and temper, as well as for the examination result.

Though some bright, quick students can cram for an examination with some success, crammed knowledge is very soon forgotten; and a diploma on the wall is not as much use as knowledge really inside the head, when the student begins to work in the appropriate profession.

The time to begin passing an examination is at the beginning of the course. The knowledge expected of the student is normally an amount that the average student likely to take such a course may reasonably be expected to learn over the length of the course, by steady effort. It is generally impossible to learn all that should be

known in the last week or even in the last term.

When beginning a course of study, the wise student: (1) reads the syllabus; (2) looks at some previous examination papers, to gain some notion of how the matter will be examined; (3) settles at once to begin to master the first steps in the syllabus.

Panic, strain, resentment and sleepless nights are not a necessary part of ordinary examinations in colleges, universities and similar institutions. The student who from the beginning shows foresight and realises how much there is to learn, who begins serious work at once and spreads the learning over the whole period of the course, can face examinations at the end of the course in quiet confidence.

2. **Persistence.** No man ever cut down a mighty tree by hitting it once with an axe; and very few students can learn something by looking at it once. Probably the hardest part of study is sticking at it hard enough and long enough.

The technique of persistence is not an easy one. But the student who realises, right at the beginning of the course, that perseverance will be needed, that sometimes irksome self-discipline is an almost inescapable part of training for a career, that to succeed in examinations does usually involve some sacrifices of amusements and spare time, and that studies must be a major concern throughout the course, will tackle his or her studies more sensibly than the student who does not face these facts.

Those who picture a student's life in a college as an easy, privileged one know nothing about the demands of real study; and the task of the part-time student is a gruelling test of self-control and persistence.

It is steady work that brings the average student to success, not a few bursts of panic-poisoned cramming.

Different modes of self-discipline suit different people. But in general the best helps to persistence are: to cultivate interest in the subject; to try to ignore one's own vague wishes to be doing something else; to cultivate positive suggestions such as "I have some work to do, now; it must be done; so I will get on with it!" or "Tonight I can master those equations" or

"I will have this chapter well in my head by the end of the week!"

It is very easy to sit vaguely looking at a book and pretend, even to ourselves, that we are working. Unless we are making some kind of effort, we are not.

Our work conditions should, as far as possible, aid persistence and concentration. We should aim at studying in a quiet room, with adequate lighting and ventilation, warm enough for comfort but not so warm as to send us to sleep. We should have a table and chair of comfortable heights and no clutter on the table to distract us from the task in hand.

We should make ourselves reasonably comfortable and take reasonable care of our health, for a sick or suffering person is seldom as efficient as a healthy untroubled person. We should not try to work with the radio on, or to talk and work at the same time. And we should have the best equipment—notebook, pencils, books and so on—that we can afford.

On the other hand, we should try so to train ourselves that if we have to, we can study anywhere and with any noisy or irritating background. There is no merit in cultivating comfort to the extent that we cannot stand a little annoyance now and again.

3. Knowledge of psychology. Any student will study better for an elementary knowledge of psychology in general—in order to run his or her life better and so avoid at least some anxieties and strains—and of the psychology of learning, in particular.

Nowadays there is no need for a student to blunder along miserably, making useless notes, reading inattentively, never sure what he knows, never knowing what is important. Modern study methods are based on practical psychology and are no longer hit-or-miss. A student facing a two-year or three-year course of study would save a great deal of time and heartache by devoting a few hours at the beginning of the course to a little reading on this subject.

The student who has an apparently insoluble study problem may be helped by a psychotherapist or psychiatrist; but he should first consult his tutor or other supervisor, who will certainly know at least

something of how to study the particular subject.

A knowledge of the workings of our own mind helps us to take advantage of these processes.

It also saves distress. For example once we know about the phenomenon called a plateau of learning—the period in which we seem unable to take in any new knowledge, but the old is being consolidated below the surface of the mind—we do not suddenly feel with terror that our capacity for learning has gone.

When we know a little about the association of ideas, we can use this habit of the mind to help our memory.

4. Use of all resources: Some students depend too slavishly on what the lecturer says; others, on one textbook or some duplicated notes. Even today, comparatively few students do enough background reading, make enough effort to work things out and discover things for themselves. Yet what we have found out for ourselves usually stays in the mind much better than spoon-fed material.

The student who wishes to do well in examinations knows that a course of lectures or a prescribed textbook is only the beginning of study. These should provide a soundly proportioned, trustworthy framework to which further knowledge can be attached.

There are nearly always other books on the subject—to be found not only in bookshops but in libraries. The student who learns to sit in a library and do several hours' reading on the subject, reading that is not prescribed, but that enriches and broadens his idea of the subject, is on the way to a very good examination result.

The latest researches in a subject are not to be found in books, but, more often, in the specialist magazines devoted to the subject. These magazines are likely to be filed in an appropriate library. Ordinary newspaper and magazine articles often give a new point of view, though the wise student remembers that these are often oversimplified, or very popular in treatment.

We all know how the person who can talk on one topic only is a bore; but students of a subject should sometimes talk about their subject.

The wise student is never afraid to ask a question: "He who asks a question is a fool for a moment; he who does not ask remains a fool for ever." Lecturers, tutors and instructors of every type are generally pleased to be asked a sensible question, and try to give useful answers.

The slow student who is not too proud to turn to a cleverer student and ask for some help will probably get it. We all like to feel important and superior by helping others.

Radio and television programmes relevant to the subject may be helpful; in some subjects various commercial firms supply useful charts and study material; there are societies and local clubs for many branches of study.

The thorough student makes use of such aids and acquires a certain solidity and depth of knowledge never achieved by the lazy copier of lecture-notes who tries to make do with a minimum.

5. Sense of purpose: One obvious purpose for a student to keep in mind is passing the examination, a deeper purpose is the career to which the examination will lead, still deeper be the real motives for our choice of a career.

Not everyone can choose a really congenial career—though many more people could do so than do so today, with more self-knowledge, less parental pressure, fewer anti-happiness attitudes in society and education, and more frank discussion of career problems.

Those who are consciously preparing for the work they most want to do already have a fairly adequate driving purpose to keep them at work.

The many people who, though not having a deep sense of vocation, feel no resentment about their probable careers can help themselves in study by thinking of the advantages of the career planned.

What of those who are forced into a really uncongenial line of work? Frankly, I would advise every such person to make all possible efforts to escape from the trap before it is too late. A mind full of resentment, fear and hostility is never going to be very successful in mental activities as constructive and exacting as real study is.

The more a student feels convinced that study is leading towards a career that is either useful or pleasant, or both, the more

purposeful will the studying be; but to some extent a sense of purpose can also be cultivated.

The student who feels rather aimless and reluctant can often gain in drive and persistence by thinking about the ultimate aims of the study. Other motives, though less realistic, can be useful; the thought of how pleased parents, friends or sweetheart will be over a success; the thought of some prize or scholarship; the picture of oneself in a graduate's gown or in some other situation of prestige; and even—though a rather unworthy motive that should never be a main one—the thought of how annoyed one's enemies will be when one has succeeded and "shown 'em."

These, however, should all be minor helps to a sense of purpose. The aim of study is either to aid us in a career or to improve the quality of our living by broadening the mind in some way. Personal, very subjective, motives cannot, in themselves, be adequate.

6. System: A few people with a certain kind of neurotic personality are addicts of system. Everything must be arranged in a certain way, done as it was done last time; there is no room for spontaneity or progress. Such unhappy specimens, however, are seldom found among young students, who more often make the mistake of too unsystematic a method.

A timetable of work will save many students from giving a disproportionate amount of time to a favourite subject and neglecting something less attractive, that may in fact, being harder, need more time.

To make a rule of doing an hour's work before breakfast means that at least some work gets done daily.

Once such a habit is established, it is no longer any hardship. To keep books and papers, notebooks and stationery, pencils and pens, in specific places, saves a great deal of time.

A notebook for tasks to be done may save an embarrassing oversight. Something to be memorised can be copied on a postcard and carried in pocket or handbag, to be studied in odd moments, such as in a bus queue.

An engagement diary is a necessity to a busy person—and affords some check on how time is spent.

For most subjects, loose-leaf notebooks are much better than exercise-books; for

with a loose-leaf system new matter can be inserted in the most convenient place.

For example, the student's lecture notes can later be supplemented by notes on a book the lecturer recommended. Anything that has been missed can be put in later, without turning the notes into a muddle.

Loose-leaf notebooks, and, for some subjects, such as languages or botany, index cards, help to classify information. Until we have sorted information it is not really of much use.

7. Wise management of time: This is one aspect of systematic study. The skilled student is aware of the value of time, and knows that, being invisible, it is one of the valuable resources most easily wasted. Moreover, it can never be reclaimed.

Years of study and years of work among students have convinced me that it is not the evening deliberately spent at the cinema, or the afternoon on the river, that is a menace to work. It is the time frittered away in meaningless potterings that give no satisfaction.

Every student needs some periods of recreation. Every healthy person has hobbies, friends, interests outside the area of studies and career. A plan of work must, to be realistic, allow some time for fun, social life and relaxation; though the serious student usually finds a fairly strict and dedicated life is necessary.

However, nearly all of us find it fatally easy to spend too long over the newspaper; to sit over lunch in idle chat; to lounge around over coffee for much longer than we can spare; to get into bad habits of being just a little late for everything; to potter when we ought to be going to bed and so stay up too late, with nothing to show for it except a sleepy head in the morning.

We waste time looking at our work and thinking what a lot there is. We waste time hunting for that pen we so stupidly mislaid. We pick up a book we do not really want to read, and read a few bits idly. We stare out of the window although there is nothing interesting to see. And most of us waste a great deal of time in talk that give no pleasure and does no good.

Any student who has real difficulty in settling to work is likely to be helped by making a timetable. The more self-disciplined a student is, the more flexible the

timetable can be. The student who works hard for four days often finds there is time for several social activities during the next two; the potterer and a putter-off never finds time for anything.

A good general rule for the busy person, especially the student, is as far as possible, always be doing something necessary, or something positively pleasant or sleep.

A very common mistake indeed is to underestimate the time that will be needed to do a piece of work. It is therefore better to get into the habit of somewhat overestimating the time a task demands; it is always a pleasant surprise to find one has finished ahead of schedule. But to be short of time may spoil the work.

A good habit to cultivate is that of using odd moments sensibly. For example, a student can do some repetitive learning while washing and dressing; or a frustrating ten minutes waiting for something can be spent in useful reading (many girls have absorbed a surprising amount of knowledge while waiting for nail varnish to dry).

This does not mean that every minute of the day must be filled with study. Brief rests are important for efficiency, but this is a good weapon in overcoming the habit of pottering.

8. Courage: The kind of courage a student needs is not, usually, physical courage; it is the courage of facing realities and handling them. Successful study is seldom done by a student who is unwilling to tackle hard work, to make an effort, to accept the challenge of new mental experience.

Some people find it hard to accept that they have to work to earn a place in the world. Their attitude to work is one of resentment, their method of work based on the wish to do as little as possible. Such an attitude is infantile.

All creatures, with a few very rare exceptions nowadays among human beings, must, during their period of maturity, make some effort to gain what they want. Worms do not come to the bird and fish do not come to the sea-lion on a plate. The student is often just at the age when vital realities are becoming obvious, but acceptance of them remains difficult. Any student who wishes to succeed will be wise to cultivate a cheerful, zestful, adult attitude to work.

9. Enthusiasm: This idea leads on to what is really a better, more spontaneous, vital and happy one: that of positive delight in work.

Study ought to be one of the most delightful of all forms of work. It gratifies curiosity in a socially acceptable way. It is interesting. It adds to our sense of power. It is often related to experiences of beautiful or wonderful things.

It is also a privilege; there are plenty of people still alive today who have risked their very lives in order to study and become educated.

There is a common belief that enthusiasm is in some way childish and weak, but this is very nearly the exact opposite of the truth. To be enthusiastic about worthwhile things, to give of one's best, to take a pride in good work, to have become capable of spontaneous delight and zest, is one of the marks of a healthy, mature personality.

Our present society is so full of commercial values, cynicism and the suppression of the happier, more generous emotions that the capacity for enthusiasm (like the capacity for affection and tenderness) is often crushed, snubbed or sneered out of people. But the student who has the courage and private freedom to cultivate enthusiasm and a sense of joy in good work will find the study much easier, pleasanter and more successful than the one who allows himself to be moulded into another dreary young cynic.

Enthusiasm is very largely a matter of emotional health and vigour; but to some extent we can, in studying, cultivate it, by looking for what is interesting.

To approach even a "dull" subject as if we expect to find something interesting in it often enables us actually to find the interest. To bring to study some element of wonder; to encourage our own curiosity to enjoy linking facts or finding parallels or working out explanations; these are aspects of constructive enthusiasm.

The most successful study, then, is not done in resentful fear of examinations. It is done in intelligent, planned, long-term preparation for examination: preparation that when the course nears its end leaves the student to face the final tests calm, confident, informed and surprisingly happy! (Courtesy: 'The Psychologist Magazine')

NATIONAL CALENDAR

March 22 marked the commencement of the year—Saka 1893—according to the uniform National Calendar introduced four years ago.

This calendar, called the *Rashtriya Panchang*, is based on sound scientific calculations and adopts the tropical year (the year of seasons) as the length of the year.

There is a great deal of diversity in the traditional *Panchangs* in India which differ from each other in many respects like the beginning of the year, the first day of the month, names of the months and sometimes the time of the occurrence of the same astronomical phenomena.

There are over 30 traditional *Panchangs* which are followed in different parts of the country.

The traditional *Panchang* year is 23.8 minutes longer than the time taken by the sun in its successive passages through the same equinox, which should really constitute the correct length of the year.

In 1952 the Government of India set up a Calendar Reforms Committee to bring about a scientific and uniform system of calendar calculations throughout the country.

Acting on the recommendations of the Committee, on which were represented leading scientists, the *Rashtriya Panchang* was introduced by Government on March 22, 1957, corresponding to the 1st of Chaitra, 1879 of the Saka era.

The year according to the National Calendar begins on the day following the vernal equinox, i.e. March 22 in a normal year and March 21 in a leap year.

The number of days in different months is fixed except that in the leap year the duration of the first month, Chaitra, goes up from 30 to 31.

The National Calendar is being brought into increasing use, simultaneously with the Gregorian calendar, for a number of official purposes.

Official announcements in the Gazette of India and communications from Government departments to members of the public bear the dates according to the National Calendar, and the corresponding date of the Gregorian calendar.

Morning news broadcasts from All India Radio and announcements also use both the dates.

FUTURE OF DEMOCRACY IN INDIA

By K. M. PANIKKAR

The significant fact in respect of the States in Asia that acquired their full independence after 1947 is that every one of them discarded monarchical authoritarianism as a form of government and opted for one form of democracy or another. And even the States which were traditionally monarchical, like Japan, Thailand, Nepal and Cambodia modified their monarchical systems radically enough to permit their Governments to function in a democratic way.

Thus today we see in Asia forms and structures of different kinds of democracy with limited monarchies at one end in Japan, Nepal etc. and with democratic centralism in China and the Communist States at the other. In between we have apart from the representative parliamentary democracies of India, Burma and Ceylon and the Presidential system in the Philippines, the guided democracy of Indonesia and the so-called basic democracy in Pakistan. Nothing demonstrates the dominance of the democratic idea so much as the fact that even military dictatorships find it necessary to disguise their true characteristics by claiming to be some form of democracy or the other.

No Deep Roots

The democratic system of government has no very deep roots in Asia. Though it is claimed that in ancient India and elsewhere there were the beginnings of democratic institutions and ideas, the government of States by the elected representatives of the peoples is a modern institution which developed mainly in Europe and America. Besides it is only in our own time that democracy has come to include the totality of the people in the machinery of government and in the exercise of power. The great European States themselves reached that stage of full democracy only by slow and measured steps, but in Asia the prestige of the form of government is so great and the democratic ideal so dominant following the victory of the democratic nation over the Fascist that every country which became newly independent accepted at least in principle the doctrine of a full fledged democracy.

Soon however it became obvious that in many countries the system was not func-

tioning satisfactorily. President Syngman Rhee in South Korea set at naught the democratic constitution of the Republic and assumed a dictatorial role. In Thailand, the dictatorship of one military leader succeeded that of another, while Pakistan, after many experiments of temporary bureaucratic authority with a parliamentary system, succumbed to military rule. Ceylon and Burma trembled for a time on the verge of authoritarianism but regained their balance and steadied themselves through parliamentary action. The democratic idea can be said to function today only in India, Burma, Ceylon and Malaya.

What is the democratic idea? Basically, it is the doctrine that the will of the people should prevail in all matters of concern to the people. The forms and institutions may differ. The Presidential system of the United States, which in Asia is represented by the Philippine system, is as much a system of democracy as the system of responsible parliamentary government as we have it in India. The essential test is whether all authority proceeds from the people and whether the people have adequate methods of controlling those invested with power, be they individuals or institutions. Besides it is important to remember that democracy is more than a question of parliamentary government, of cabinets enjoying the confidence of Parliament and sustained in authority by a majority of votes. Unless the control of the people functions at all levels from the village to the Central Parliament, whether parties, trade unions, professional organizations, in fact all institutions which exercise power over the people, true democracy cannot be said to function even if there is an elected parliament and a cabinet responsible to it.

Fascist Traditions

Why is it that after a first experiment most of the States of Asia have reverted to non-democratic and authoritarian form of government? In examining this we should not forget that a reversion from democratic institutions is nothing new and is not in any sense a special feature confined to Asia. In the inter-war period the world saw among many nations of Europe a large-scale denial of democratic values which came in a measure to be associated with fascism. It is well to remember that

not only Germany and Italy but most States of Western Europe, excepting Great Britain, France and monarchies in the Northern Europe, denounced liberal democracy and became worshippers of the totalitarian non-democratic idea. Nor has the tendency died out yet in Europe. Spain and Portugal still uphold the fascist traditions of their past. The idea, therefore, that democracy represents in some sense the liberal human spirit and is, therefore, bound to win out in the end has no justification.

Further, it has to be remembered that democracy is to a great extent based on the voluntary labour of large sections of the people. The party system without which large democracies involving millions of people cannot function is essentially a voluntary organization for the purpose of working political institutions. The day-to-day working of party committees, research into public problems, popularization of questions of importance, even pressure groups in the interests of public welfare, have to a large extent be based on the voluntary association of people moved by a sense of public duty.

Democracy is, therefore, essentially a question in which the people, functioning no doubt in parties, groups and often representing special interests, devote themselves to the public cause. In respect of Asia, it is in regard to this that democracy has been weak. In most countries of Asia, the electorates on which representative institutions are based are mostly illiterate. Consequently it is difficult for the general public to provide the kind of broad-based activity that a democracy demands for its effective functioning.

The fragmentation of parties, the absence of intellectual leadership which would give to organized groups not only programmes and policies but keep before the public the principles on which these programmes are based, uphold purity of administration and in effect give to parliamentary government its continued sense of responsibility to the people which is the essence of democracy, can only come when at least a large section of the people maintain a consistent interest in political life.

In Asian countries, these features of democratic life are not yet very prominent. In countries like India, Ceylon and Burma, which have had more than one general election, we can see these features deve-

loping to some extent. But elsewhere, the truth that dictators do not like organized political parties and cannot encourage independent political thinking by intellectuals is being demonstrated more and more effectively.

Press Freedom

Another aspect of democracy which is important and which also shows a chequered growth in Asia is the freedom of the Press. It is a truism to say that without a free and popular Press democracy cannot function. The new countries of Asia are instances of this fact. In the countries which have gone over to non-democratic systems, the Press does not enjoy any freedom. It is controlled by the authorities and is allowed to represent in important questions only the official point of view. But even in countries where democratic institutions are functioning the Press has shown certain weaknesses which may affect political life in the long run. In most of these countries the power of the Press is, generally speaking, concentrated in the English language dailies which directly and through the local language papers seek to influence the public.

By the nature of present-day production, the newspaper organization is a major industry requiring large finances and considerable organizational structure. There is, therefore, a tendency for the great newspapers to become affiliated to big industrial interests. The control of the voice of the Press by these monopoly groups may become a source of weakness to the working of democracy, more especially so where the democratic institutions have not taken firm roots and the electorate is largely illiterate and consequently immature.

The basic defect of democracy in Asia is that the principle of obedience which is enshrined in democracy, that is, the right of the representatives of the nation by a majority to decide on national affairs after full discussion is not easily understood or accepted by the people. It is nothing so axiomatic as to receive the acceptance of all by mere enunciation. But whether the system of majority rule is right or wrong, it is the only workable method of democratic decision and is, therefore, accepted as a valid doctrine of obedience.

If the voice of the elected representatives has to be accepted as the voice of the nation and the decision of the majority re-

cognized as entitled to obedience, it is obvious that the method of choosing the representatives is of the highest importance and has to be accepted by the people as a whole as just, fair and above board. Clean and honest elections with full freedom of expression and persuasion are, therefore, the foundations of democratic government, because they ensure the representative character of those elected and their right to speak for the nation.

We have already emphasized that democracy is not a question of an elected national parliament. It is a system where authority at all levels proceeds from the people and is controlled by them. Now elections at levels, from village councils to national parliaments, involve the continuous affirmation of the finality of the people's voice in public affairs and their insistence on obedience to the majority by providing for the elimination of that majority in case of misuse of authority.

The doctrine of obedience to the will of the majority, subject, of course to the sanction of an appeal to the people direct, is not something which is easily understood or accepted by people without adequate mental preparation. In monarchical countries where obedience is due to a visible head who is invested with power and majesty, every one understood it without difficulty. The king's word was command. Equally in a dictatorship there is no question as to whom one should obey. But in a democracy it is not evident why the views of a majority should be considered as binding on those who happen to be a minority at the time.

The counting of heads cannot be an assurance of truth, validity or the correctness of opinion. That is indeed true. But the experience of democratic countries has shown that it is the only way of enforcing the will of the people where power is vested in the people themselves and not in a monarch or a dictator.

One of the major weaknesses of Asian democracy is the refusal of sections of people to accept what the majority decides in respect of matters where popular sentiment carries deep conviction or age-old custom is involved. All the same democracy has come to stay in Asia.

Hypocrisy, it is said, is the tribute that vice pays to virtue. The very fact that the authoritarian governments among the new

States should disguise their regimes by such words as guided democracy and basic democracy itself shows that the idea of democracy is more widely accepted than its rivals and that those who seek to gain popular favour for their adventurist political experiments have to find some kind of democratic appeal to make them acceptable to the public. That is evidence enough that such political forms are transient and democracy will assert itself again in those countries of Asia where it is now under eclipse.

WHO HIGHLIGHTS

The most important achievements since WHO began its work in S.E. Asia Region in 1948 can be summarized as follows:

1. Rapid expansion of programmes for the control of major communicable diseases, their development into mass campaigns and their gradual integration into the general public health services.

2. Tremendous strides in the training of personnel, especially nursing personnel and health auxiliaries.

3. Emphasis on paediatrics, especially paediatric education, as well as the promotion of maternal and child health services, and—what is more important—the integration of these specialised services into the public health services.

4. The establishment of departments of public health and preventive medicine, the integration of the teaching of preventive medicine into the general curricula of medical schools and improvement of medical education in general.

5. Promotion of health education by the training of key workers and the demonstration of field technique at the country level.

6. Active promotion of the collection and utilization of vital and health statistics.

Perhaps the most important achievement of all, however, has been the fact that the Governments in this Region now look upon WHO as their natural collaborator and partner in all efforts to improve the national health services.

Come what come may, time and the hour runs through the roughest day.

—William Shakespeare

PERIL OF INFLATION

By B. R. SHENOY

Union budgets since Independence have been deficit budgets almost without exception. With intensified planning which began in 1955-56, the deficits have remained at a high level, total deficits since then being Rs. 1,483 crores, or an annual average of Rs. 297 crores. In the three preceding years the annual average deficit was Rs. 57 crores.

The Reserve Bank figure of overall deficits, given in its **Reports on Currency and Finance**, for the past five years is Rs. 1,200 crores. This approximates the official figure given in the last Budget speech. The difference between our figure and the official figures is due to the latter excluding from deficit financing long-term public debts taken up by the commercial banks and the Reserve Bank. It seems to be believed that payments by the banking system for long-term debts are drawn from the voluntary savings of the community and that the Treasury Bills held by the banking system alone constitute deficit financing.

Public Debt

This seems to be a delusion. From the standpoint of bank finance of budget deficits, it is immaterial whether the banks take up documents maturing in three months Treasury Bills—or other public debt redeemable after a term of years. If bank subscription to the former constitutes deficit financing, so does subscription to the latter. When commercial banks subscribe to permanent debt from reserves such subscription is indistinguishable from purchases of public debt by the Reserve Bank. It is also immaterial whether the banks acquire the debt at the time of issue or pick it up from the market later. Budget deficits are measured by the sum of the increases in the public debt, including Treasury Bills, held by the Reserve Bank and the commercial banks adjusted for changes, now minor, in the cash balances of the Government.

Even our figures of budget deficits do not today narrate the whole story of deficit financing. Part of the budget outlay on the Plan is financed by the grants and loans made by the U.S. Government from counterpart funds—rupee payments of created moneys made to T.C.M. by the Government of India for imports from the U.S.

since 1954 under P.L. 480. Such finance of plan outlays would add to the monetary circulation in precisely the same way as conventional deficit financing.

Plan projects for finance by grants or loans from counterpart funds are "adopted" by negotiation between the Governments of the U.S. and India. The grants do not leave behind any debt documents. They are credited to the revenue part of the budget. The debt documents relating to loans from counterpart funds are held by the U.S. Embassy. Disbursements from counterpart funds would not, therefore, show up in our computations of budget deficits. They represent extra-territorial deficit financing by the U.S. Government with the concurrence of the Government of India.

The decline in the public debt holdings of the banking system during the current financial year suggests control over conventional deficit financing. Since prices have nevertheless risen during the past 10 months at an annual rate of over 8 per cent and money supply has expanded, it is possible that disbursements from counterpart funds have assumed a more significant inflationary role during the current year than hitherto. Comprehensive statistics of disbursements from counterpart funds are not published. From indirect data, their magnitude during the past five years would appear to be of the order of Rs. 75 crores. This includes grants and loans for the plan, U.S. Embassy expenditure and loans to private sector firms. The amount of counterpart funds, now at Rs. 461 crores, will reach Rs. 1,068 crores with the completion of the projected P.L. 480 imports in the next three years.

We have made rapid strides during the past decade or more in the supply and presentation of our economic, financial and monetary statistics. It will greatly aid a correct appraisal of the economic situation if statistics of disbursements from counterpart funds and of Treasury Bills and other public debt held by commercial banks and the Reserve Bank are issued as a regular series. Little is to be gained by leaving such significant data for guesswork or inference.

Money Supply

Though our budget deficits have been

inordinately large during the five years ending 1959-60, money supply expanded by a little over one-half (Rs. 783 crores) of that amount. The expansion should have been larger than the deficits by the secondary expansions of bank money. The explanation lies in the heavy balance of payments deficits of the period (Rs. 1,087 crores, excluding P.L. 480 imports of Rs. 461 crores). Foreign exchange to cover payments deficits being provided by the Reserve Bank, the purchase of foreign exchange withdraws equivalent moneys from circulation into the bank. The opposite movements of funds—Rs. 1,483 crores from the Reserve Bank into the pockets of the public on account of budget deficits and Rs. 1,087 crores from the pockets of the public into the Reserve Bank to purchase foreign exchange—cancelled each other in large part, leaving behind with the public a net expansion of Reserve Bank money of Rs. 396 crores. The total expansion of money during the period was the result of the additions to this sum of the secondary expansion of bank money and the disbursements from counterpart funds.

Foreign Aid

The balance of payments deficits were covered by withdrawing Rs. 525 crores from currency reserves and Rs. 562 crores from foreign aid. With currency reserves pressing close to the rock bottom, since 1958-59 we have been rescued from runaway inflation almost wholly by foreign aid. The two together at first, and foreign aid principally thereafter, kept down the expansion of money to well below the budget deficits and restrained the price rise during the period 1955-56 to 1959-60 to 32 per cent. It does no good to the Indian economy—nor does it add to our stature—to rely on the international fire brigade continually. On the one hand, the claims on the brigade are apt to mount with the tempo and spread of the cold war and, on the other, the resources available to it might shrink with the growing pressures on U.S. balance of payments and the threats to the dollar. It is much more advantageous and also simpler to prevent fire, seeing the utter futility of, and the damage caused by, the attempt to invest non-existent resources.

Evidence is lacking that we wish to take this more honourable course. Budget deficits and inflation have been entirely

due to accelerated Plan investments. This is evident by the fact that, though certain heads of expenditure, notably defence, have been claiming more in recent years, Plan outlays have risen by vastly more than budget deficits. The Third Plan is of fantastic dimensions. Though we have dressed it up to show foreign aid requirements at Rs. 3,200 crores, this is an understatement. Basing our estimate of domestic savings on past performance, the gap in Third Plan resources to be covered by foreign aid may be of the order of Rs. 6,325 crores. Since aid on this scale is inconceivable and yet if we attempt to implement the Third Plan, runaway inflation may overwhelm us.

Some have asserted that our budget deficits are planned to match the planned balance of payments deficits in conformity with the well-understood tenets of guided economic development. It is difficult to support this claim by evidence. Planned payments deficits should obey commands. Actually it is our payments deficits that have been ordering about the entire economy. The Second Plan visualised drafts of over Rs. 200 crores in the currency reserves over the entire plan period. This limit was reached in the first year of the plan. Unable to hold the deficit in check, the currency law was amended twice to step down the legal minimum reserves and to revalue the gold in the reserves, private imports were cut by 36 per cent. in two years in addition to less drastic prunings subsequently and earlier, and we had to arrange for emergency aid from the Aid-India Club in August 1958. This bespeaks uncontrolled balance of payments deficits ensuing from uncontrolled and inflationary budget deficits. It is perilous to persist in deficit financing. (Courtesy; *The Times of India*)

Learn to speak well. When a man becomes prominent in his trade or his town, sooner or later he will be called upon to make a speech. Then, unless he has studied the art of public speaking, he will probably let himself down. He will do himself more harm than good—**Herbert N. Casson**

* * *

It is to books that great men of every age have owed the inspiration that drove them out from the beaten path, and made them such as we know —**Frank Mundell**

CRISIS IN LAOS

By R. K. VASIL, M.A., Ph.D.

The Kingdom of Laos occupies an area of about 90,000 sq. miles and has a population of anything between 1½ million and 3 million. The two major cities in the country are Luang Prabang, the royal capital with a population of about 15,000 and Vientiane, the administrative capital with a population of about 20,000. Most of the trouble for this simple and peace-loving people emanates from the geography of the country. The country has a 500 mile border with Communist China and North Vietnam. Along the border are thick forests and marshland which make infiltration easy and detection and control extremely difficult.

The landlocked kingdom of Laos is surrounded by an equal number of Communist, pro-United States and non-aligned countries. It borders on two Communist States, China and North Vietnam; two pro-U.S. States, South Vietnam and Thailand; and two neutrals, Burma and Cambodia. All pull it to their own side. The country is subjected to heavy pressure from the Communists in Peking and Hanoi who would like to see Laos turned into a Communist state. Equally potent influence is exerted by Washington and its allies in Saigon and Bangkok who want to turn the Kingdom into an effective barrier against Communist advance in Southeast Asia. Then the policy of non-alignment as practised in Pnom Penh, Rangoon and farther in India has its own attraction for them. And that is enough to set the stage for the tragic drama that is being played in Laos.

In early 1945, towards the end of the Second World War, the Japanese, who were in occupation of the country since 1941, got afraid of the growing pro-allied sympathies of the French and in a swift coup drove them out. Until this time the French had been allowed to retain the internal administration of the country by the Japanese. Later, in April, 1946, after the French had been driven out, the Japanese succeeded in encouraging King Sisavang Vong of Luang Prabang to proclaim independence from the French. End of the War saw much of Laos in the hands of Chinese troops. In conformity with the agreement reached at the Potsdam Conference of 1945, Nationalist China had accepted Japanese surrender north of the 16th

parallel in Indo-China. It was only in the spring of 1946, that the French re-entered Laos and replaced the Chinese.

Before the French returned to Laos after the War a group of nationalists, bitterly opposed to the French, had launched the Lao Issarak (Free Laos) movement. This group led by Prince Petsarath and his half-brothers, Souphavong and Souvanna Phouma, was successful in establishing a Free Laos government in Vientiane in October, 1945, with the encouragement of the Chinese. They deposed the King who had remained sympathetic to the French.

The French, on their return in the spring of 1946, had to face an entirely changed situation in Laos. They were confronted with a Free Laos government operating from Vientiane. The nationalists fought and lost against the French and had to run away to Siam with their supporters, where they set up the Free Laos "government in exile" in Bangkok. The government in exile was headed by Prince Petsarath with Prince Souphavong as the Minister of Foreign Affairs and Defence. Following this in Laos a government under King Sisavang Vong, sympathetic to the French, was set up, which on the 27th August, 1946, signed a *modus vivendi* with the French. The French recognised the King as the King of the whole of Laos.

King Sisavang Vong held elections to a Constituent Assembly towards the end of 1946 and later on 11th May, 1947, gave the people of Laos a Constitution. Absolute monarchy of old was abolished. Constitutional monarchy, with a Prime Minister and a cabinet responsible to a popularly elected assembly, was established. Ties with France were retained by joining the French Union as one of the Associated States.

Although the changes made in the formal set-up of government were quite radical and for the first time opposition was given a legal medium for the expression of its views, they did not satisfy the nationalists, the Lao Issarak. In spite of the fact that "Laos had achieved a considerable political autonomy it continued to live under a nationwide network of French control."

Among the nationalists, Prince Souphavong had started getting restive by this

time and had started looking towards the Communist Vietminh in North Vietnam. This caused fears amongst the other nationalists. They threw Souphavong out of the Lao Issarak. Thereupon Souphavong withdrew along with his followers to an area close to the Laos-Burma border where he organised a "Committee of Laotian Liberation", with the aim of "cooperation with resistance movements in Vietnam and Cambodia against French colonialism."

At this time the Siamese government under the new Premier, Pibul Songgram, got afraid of Vietnamese communism and made it more and more difficult for the Indo-Chinese nationalists to operate from there. More, on the 19th July, 1949, the government in Laos signed an accord with the French which granted them more real independence. This accord was considered by the two half-brothers of Souphavong, Petsarath and Souvanna Phouma, to have provided some measure of independence. And, therefore, in October of the same year, they announced the dissolution of the Free Laos government in exile and called on their followers to return to Laos. They felt it was time to collaborate with the government of King Sisavang Vong. Prince Petsarath who was approaching sixty chose to abstain from politics and elected to stay on in Thailand, while Souphavong "threw in his lot with the Vietminh."

In August 1950, Prince Souphavong transformed the Committee of Laotian Liberation into a Laotian Resistance government which declared itself to be "the only real regal government of Laos" and adopted a national flag and a national anthem. It also established a Laotian People's (Pathet Lao) United Front. Soon the Communist Vietminh in order to strengthen their control over this group led by Souphavong acted to integrate the three movements--Khmer Issarak in Cambodia, Free Laos, and the Vietminh. In March, 1951, the representatives of the three movements met together and established a Joint National United Front for Indo-China. The manifesto of the Front declared:

"The French colonialists and the American interventionists are making all-out attempts to conquer Vietnam, Cambodia and Laos and to enslave these three peoples once again."

This marked the opening of an extremely significant new phase of the Com-

munist movement in Indo-China. Following this, for the first time the struggle in Laos and Cambodia "began to feature in the context of world Communism as a whole." Also for the first time Laotian and Cambodian delegates were seen in international gatherings of the Communists abroad.

The Vietminh not too long after strengthening their control over the movement in Laos chose to strike. In the middle of April 1953 Vietminh troops aided by Laotian guerillas invaded Laos. At first Hanoi denied that any Vietminh regulars had participated in the invasion. It maintained that the invasion was carried out by the Laotian people who had risen against the French. However, two days later they admitted that Vietminh "volunteers" were assisting the Laotians. And soon the invasion was described as "a reply to provocation by the French" who were accused of using Laos as "a base for attacks on the Vietminh."

In a short time the Vietminh troops were able to take over Sam-neua (23 miles from the North Vietnamese border) and Xieng Khouang (further down south-west and not very far from Luang Prabang and Vientiane). Suddenly in May three weeks after the start of the invasion, from not at all an awkward position, the Vietminh started to withdraw. Though the Franco-Laotian forces recaptured many of the areas from the invaders, a considerable area of about 20,000 sq. miles in northern Laos remained under the control of the Vietminh. At Sam-neua the "Free Laotian government" under the leadership of Souphavong was set-up. And this was enough to give them a foothold from where later operation could be launched and subversion could be conducted. In this area the Vietminh left behind them several thousand political and military agents. They had not been idle. They trained and organised Laos peasants into guerilla units which operated nominally under the so-called "Free Laos Government".

Following this the French, who had retained considerable control over the Laotian government under the Franco-Laotian treaty of the 19th July, 1949, woke up. They were pressed by King Norodom of Cambodia who made it very clear to them that it would be impossible to rally round Cambodians to defend themselves in case of an

attack by the Vietminh unless the French gave them complete freedom. More, the French must have come to realize themselves that unless real independence was granted to the Associated States, Communist propaganda could be successful in making people believe that Souphavong and others were fighting against the French imperialists and not against their own people. And therefore, on the 3rd July, 1953, a few months after the Vietminh invasion on Laos, the French Prime Minister M. Laniel announced that his government intended to "complete the independence and sovereignty of the Associated States" within the French Union "by the transference . . . of those powers which she has hitherto retained, in the interest of the States themselves, on account of the perilous situation created by the state of war." Negotiations were opened in Paris and on the 22nd October, 1953, a treaty was signed which recognised and declared that "the Kingdom of Laos is fully independent and sovereign state."

In late 1953, the position of the French, who had been fighting against the Vietminh since 1946, began worsening. The final blow came when on the 7th May, 1954, the heavily fortified Dien Bien Phu fell. The Vietminh prepared to advance toward Hanoi and Haiphong in the Red river delta. The French position was precarious. They requested the United States government for direct military intervention and for a time it seemed that the United States might enter the war on the side of the French. But pressure from Britain halted this. The British felt that another attempt at a negotiated settlement might be worthwhile and that the United States would better wait the outcome of the projected meeting of the Great Powers at Geneva.

Therefore, in conformity with the resolutions adopted by the British, the French, the Soviet and the United States Foreign Ministers at Berlin the Geneva Conference opened on the 26th April, 1954, to discuss "the problem of restoring peace in Indo-China." The following took part in the Conference on Indo-China: Britain, China, Soviet Russia, United States, the three Associated States (Cambodia, Laos, and Vietnam) and the representatives of the Vietminh. On the 21st July, 1954, the conference ended successfully with the signing of separate cease-fire agreements regarding

Cambodia, Laos and Vietnam. The settlement brought an end to the war in Indo-China which had lasted for about eight years. Under the settlement the Vietminh recognised the independence and political integrity of Laos and agreed to withdraw their troops from the country within 120 days of the settlement. The Pathet Lao forces would be "concentrated in twelve assembly areas . . . and would withdraw within 120 days to the provinces of Phong-saly and Sam-Neua (the two provinces under Vietminh control), except for those who wished to be demobilised on the spot." These two provinces would remain under Pathet Lao control and would be reintegrated with the Kingdom of Laos after the elections to be held in 1955. The settlement prohibited the "establishment of new military bases and the introduction into Laos of troops and military equipment from outside." Finally a Joint Commission composed of an equal number of military representatives of the two parties and an International Commission composed of the representatives of Canada, India and Poland would be set up "to control and supervise the implementation of the armistice." The International Commission was vested with "the tasks of control, observation, inspection, and investigation connected with the application of the armistice agreement."

The United States which took part in the Conference did not sign the final agreements. However, it assured that it would not oppose any of the provisions of the final settlement. At the same time the United States President in a special statement made it very clear that the United States government would consider as "a matter of grave concern" any renewal of Communist aggression in the area. And as far as Laos was concerned it entered into agreements providing military and economic aid to Laos. Since then this aid has amounted to about \$50,000,000 a year.

(Courtesy: *The Modern Review*)

As someone has said, "He who would climb a tree must grasp its branches not its blossoms." Reading what others found in the treetops and recorded in books will make the attainment of the blossoms much easier—and much sooner possessed.

—B. F. Taylor

Atoms In Medicine

By Lt. Col. S. K. Mazumdar

Almost every day we hear or read some sensational news about the use of atomic power, radioisotopes and atomic radiations. Some of them bring out the promise of immense benefits which are to come from the power of the atom, e.g., the development of atomic energy as a substitute to conventional power, the use of radioactive atoms as tracers in biology, medicine and industry, the use of massive doses of radiation for the cure of malignant diseases and uses of radiation to kill bacteria in the food. Along with this we also come to know that radioactive atoms emit radiations which have the power to damage the living tissue as well as the genetic material. We read that with the increasing uses of radiation there may result radiation exposure to larger number of people in the population and this might result in damage to the genetic heritage.

This conflicting information between the promise of benefits from the atom and the hazards from its use has confused the common man. There has thus developed an inescapable association of concern and fear in the mind as soon as the question of atomic radiation is raised.

In order to appreciate as well as to understand the problem in its proper perspective we need to know more about the atom and the atomic radiation.

Atom

Everything we know on this earth, living or non-living, is made up of atoms. The atom consists of a central nucleus consisting of protons and neutrons, with peripheral electrons revolving in orbits, like planets round the Sun. Atom of various elements are different in structure, though they are made up of the same fundamental particles, viz., protons, neutrons and electrons.

The nucleus of an atom is hard to break since it is not ordinarily affected by heat or chemical reactions. However, if the nucleus is unstable it tends to disintegrate emitting bursts of atomic radiation, such as alpha, beta and gamma rays. This phenomenon is called radio-activity. The unstable atom is known as a radio-active atom, more popularly called radioisotope. Natural radio-activity of radium is a good example of the above.

Today a large number of artificial radioisotopes are being produced in the atomic reactors. Some of them are already well known such as radioiodine, radiophosphorus, radiogold, radiocobalt, etc. These emit atomic radiations.

The World of Radiation We Live In

It may be of interest to know that wherever man goes over the surface of the earth he gets exposed to cosmic rays and atomic radiation from radio-active substances which occur in rocks and soil. Man also gets exposed to minute quantities of radiation from radio-active carbon and potassium which naturally exist in the human body. Thus radiation is nothing new. Throughout his evolutionary history man has been exposed to atomic radiations, both external and internal and he has lived with them.

In recent years, over and above the natural radiation, man is coming in contact with and getting exposed to radiation from artificial sources, such as diagnostic X-rays, radioisotopes in medicine and industry, nuclear reactors, watches with luminous dials and television sets.

Another source of radiation, though a minor one at present, is the radio-active fallout from the atomic test explosions. With every explosion radio-active particles are thrown up in the atmosphere which ultimately drift to great distances and settle down on the earth. These radio-active particles may be invisible to the naked eye, but they emit radiation. Plants and vegetables tend to pick up and absorb these particles from the soil as they grow. Cattle grazing on soil contaminated with fallout pick up radio-activity. This passes to the milk. Consumption of these vegetables, milk and milk-products leads to deposition of radioactivity in the human body.

From what we have just discussed it is evident that man today is living in intimate contact with atomic radiation. In order to understand how these radiations affect living tissues and human beings we need to know their nature and the way they interact with living matter. The major atomic radiations consist of alpha rays, beta rays, gamma rays and neutrons. They are highly energetic and produce ions or charged particles on being absorbed in matter, for

instance, in air, water or tissue. (Light or heat radiations do not produce such ionizations.)

How Radiation Affects Living Things

When atomic radiations react with living tissue, they affect the basic biological units of life, i.e. the cells. They produce ionization in the atoms and molecules of the cells as well as in those of the fluids surrounding them. It is the production of electrically charged particles or ions which initiates physico-chemical changes and this ultimately leads to radiation damage.

With acute exposure of the body to large doses of these highly energetic radiations there may result severe injury called 'radiation illness'. Similar high exposures to localised parts of the body can lead to radiation burns. Chronic exposure over a long period may cause diseases of the blood and malignant changes. There is also evidence that the reproductive cells can be affected by radiation. In this connection it may not be out of place to remind ourselves that excessive consumption of some drugs, which are normally used for curing illnesses, may also result in damage to body and genetic cells.

As the knowledge about the nature of atomic radiation became known to us, it also became apparent from the experiments and experiences on living things (man and animal) that these radiations are not likely to produce noticeable damage to the body cells or injury to the genetic cells if used judiciously and the exposure is kept below a certain level. This gave the confidence to medical men and scientists to harness it on a large scale in the fields of medicine, research, industry and power production.

Atoms in Medicine and Research

By far the most important medical application of radioisotopes is their use as tracer atoms inside the human body. Once inside these atoms act like miniature X-ray apparatus giving out radiation which can be detected from outside.

This special property of the radioisotopes enables one to follow them inside the body during physiological processes. For example, by giving radioiodine, radiocalcium and radioiron one can detect their normal pathways of circulation. These being the normal constituents of human

body, medical scientists can now detect the alterations that are taking place in their pathways during abnormal stress or illness. Similarly a number of valuable tests using radioisotopes are being used in hospitals for diagnosis of heart, kidney, bone and liver diseases as well as to detect and locate tumours in the brain.

Patients suffering from hyperfunction of thyroid glands which makes them seriously ill can now be treated by drinking radioactive iodine. The radioiodine goes to the thyroid gland and emits radiations which dissolve the gland. Before the advent of radioisotopes these patients often had to undergo surgical treatment with all its attendant risks.

Those suffering from angina pectoris, i.e., pain originating from the heart, and not responding to treatment can now be given considerable relief and even cured completely by drinking radioactive iodine. This reduces the thyroid function and as such the metabolism. This technique is also being employed for the treatment of heart failure with waterlogging where other methods have failed.

When patients suffer from cancerous effusions in the chest and abdomen, installation of radioactive gold solution helps to ameliorate the distressing symptoms. In cancers and malignant diseases of various types by which a larger number of people are afflicted the patients can now be given relief by the use of gamma radiation from radioactive cobalt, and by the beta radiation from radiophosphorus.

Blood diseases like leukaemia (cancer of the blood) and polycythaemia can now be treated with radiophosphorus.

Thus in the fields of research, diagnosis and therapy the radioactive atoms have now come to have their say. In studies in various other diseases, and in research on metabolism, virus infections, immunology, ageing, heredity, cancers, bionomics of insects and vectors carrying diseases and in fact in every aspect of the biomedical field we see the march of the atom and its radiation, unfurling new knowledge and new hope for the welfare of mankind.

Public concern and confusion today regarding the hazards of radiation is great. Hence scientists and physicians have an

(Continued on page 421)

The Value Of Spare Time

By H. N. Casson

A young man's future depends more upon what he does in his spare time than upon what he does in his working hours. His pay at the end of the week depends upon what he does in his working hours, but his pay in five years' time depends mostly upon what he does in his spare time.

If he has no purpose and no ambition, then it doesn't matter much what he does in his evenings and week-ends. He can fiddle away his week-ends and spend his evenings picking out a horse to lose ten shillings on. He can waste his spare time, if he is not preparing himself to make more money and climb higher in this business world.

But if he has a spark of ambition in his mind, then I would say that he should spend half of his spare time on relaxation and half on self-development.

If I were a salesman, I should start every Monday morning with two books in my bag--a business book and a thriller. And at least one night a week I would go to a cinema.

A salesman gets plenty of walking and fresh air during the day. He doesn't need to play golf. That is for the sitters. And he doesn't need to play around a billiards table. What he needs when his work is over is a comfortable place to sit, and be instructed or entertained by a book or a show.

The extra bit that counts

He might do a little thinking and planning, too, in the evenings. He can lay out his next day's work, in such a way as to get the most selling time. A salesman's future depends upon learning and thinking and keeping fit. So, if he spends his spare time mainly upon these three things he will be much better off in five years than he is to-day.

We can fairly well predict what any young man's future will be by finding out what he does with his spare time. A career is seldom built up by what a man does during the working hours of the day, because most of his work is routine work. Too many others are doing the same kind of work. What a man learns and thinks in his spare time is what lifts him above his competitors. It is the extra bit that counts.

Everyone has spare time, but it is only the Competent Few who put it to a good use.

Few other men have a finer position, more honoured and more supreme, than the Captain of a great ocean liner. He is in complete control of a huge structure that has cost millions of pounds, and of all the people who work in it or are its passengers. As he stands on his private bridge, he is "the monarch of all he surveys." "How did he attain such a high position?" The answer is—he attained it by doing a score of smaller jobs efficiently and by years of study and self-development.

How to make the most of the years that are given to you—that is your most important problem. Few men realise the value of their time until they come to the end of it. Then they would give all they possess for just one more year.

The last words of Cecil Rhodes were: "So much to do, so little done." He did make a good use of his time, but he made great plans that outreached his lifetime. Wordsworth, in his old age, said: "It is good to be alive and glorious to be young." He, too, made the most of his time. And it was a Latin poet, I believe, who said: "Death plucks my ear and says: 'Live, I am coming'."

Ever since I was a boy, I have never had time enough for the things I wanted to do. Always, the end of the day has come too soon. I would gladly give £500 for a thousand hours of extra time, if it were possible for any man to transfer it to me. But time is not for sale.

Time for work and play, both—that is what I mean. Right now, I would like to go and see two big films and three plays. I would like to begin digging up the data for a new book. And I would like to visit Holland and Finland. I find that I can seldom do more than half of what I want to do. That is why I would like to buy somebody's spare time.

Life at its longest is too short to enable us to see what there is to see, to know what there is to know, and to do what we want to do. What should be said of the poor, half-alive creatures who regard their spare time as a bore and a nuisance? The first and most persistent purpose of every ambitious man should be to make a good use of every day of his life.

It was Horace Mann, I believe, who wrote these unforgettable words: "Lost! Somewhere between sunrise and sunset, two golden hours, each set with sixty diamond minutes. No reward is offered, for they are gone forever."

Even the busiest man has little scraps of idle time during the course of the day. He can use these scraps for observation, or reading or thinking. I once heard a man described as "a miser of minutes." This is not a bad thing to say of any man. It is vastly better than to call him a "time-killer."

A rule to remember

The units of a man's life are moments, not months or years. The study of efficiency teaches us to measure time in small units. As Fenelon, the French Thinker once said, "God never gives but one moment at a time, and does not give a second until he withdraws the first."

When I was twenty-one, I adopted a rule which I have kept fairly well ever since. It helped me more than any other one thing. It was this—DO SOMETHING CREATIVE EVERY DAY.

This rule compelled my brain to think. It prevented me from becoming a Robot of routine. It prevented me from being a mere student. It trained me to make a good use of every day. Whenever I broke this rule, I said to myself: "That was a day lost."

John C. Kirkwood says that "people are like plants." I think this is true. It is a fact that we do not learn until we grow older. There is a vast difference in plants. Some grow in deserts and others only in fertile soil. Some can stand alone and some are clinging vines. Some are medicinal and some are poisonous. Some bear fruit and some are parasites.

The longer a man lives the more he sees the difference in people—the low-quality breeds and the high-quality breeds. Most people retain all through life the natures they were given at birth. Only a few have the ambition and persistence to rise into a higher class. This is where men differ from plants. They can literally recreate themselves. And some men do.

We know that the one-crop system ruins farms—destroys the fertility of the soil. We know that if a farmer plants the same crop every year, without putting back

in the soil what has been lost, he will soon have poor crops. Now, it is a fact that this applies to people, as well as to soil.

What about the one-job man? What about the man who does the same work every week-day of his life? Does the sameness and monotony of his work tend to destroy the fertility of his brain? We know that it does. It does prevent him from observing and thinking unless he fertilises his brain by learning from other people and by reading instructive books and magazines.

When a man has the same work every day, he does it almost automatically. It does not compel him to think. The mass of men prefer this kind of work. They have no ambition to develop themselves as thinkers. Automatic work is easy work. It is being done more and more by machines, and machines do not think at all. When automatic work is done by people, they are in great danger of becoming like machines.

Take a course of study

This can be prevented mainly by what they do in their spare time. If the brain is idle during the day, it should be made to work in the evenings and the week-ends. The best advice that can be given to any person whose work is the same every day is this: "Take a Course of Study on some subject that interests you, or read books on that subject. Keep your brain active. Fertilise it."

Workers in offices and factories need this advice most. They are more likely to be one-job people. As for salesmen and shop assistants, they have no two days exactly alike. Their brains are stimulated, more or less, because they are constantly coming into contact with other people.

Some men are fortunate. They have jobs that compel them to think. They are the Managing Directors, Sales Managers, advertising men, designers, window display men, doctors, architects, engineers, etc. They have brain jobs. As you can see, it is well worth thinking about—this matter of keeping the brain fertile. If the mental powers are not stimulated and developed, they decay.

Edison, the famous inventor who took out about eleven hundred patents, believed that schools and universities should, above all else, develop in boys the power of creative thought and good judgment. He once

prepared a series of Test Questions for boys and gave scholarships to the boys who sent in the best answer. One of his Test Questions was:

"You are head of an expedition which has come to grief in the desert. There is enough food and water to enable three persons to reach the nearest out post of civilisation; the rest must perish. Your companions are a brilliant scientist, aged sixty-two; two guides, aged fifty-eight and thirty-two; the scientist's wife, interested mainly in society matters, aged thirty-nine; her little son, aged six; the girl you are engaged to marry; your best friend, a young man of your own age, who has shown great promise in the field of science; and yourself. Which would you choose to live and which to die? Give your reasons."

If I were answering this, I would say—I would save my own life, as I am the head of the expedition, and presumably the one whose life is most useful, and I would save the lives of my girl and my best friends.

I would save them for the human reason that I would never forgive myself if I allowed them to die. The scientist is sixty-two. His life is nearly over. His wife is less important, as she is only a society woman. The guides are negligible, and the little boy is an unknown factor. Such questions are good for men as well as for boys. They compel us to think.

There is a lazy streak in most people, not as much in women as in men. For hundreds of generations, women did the work, while men did the hunting and fighting. The men who built the Pyramids and the Great Wall of China did not work because of the joy of it. They were compelled to work by soldiers and overseers.

As all women know, most men need to be prodded or rewarded, in order to make them keep on working. In civilised countries, the stimulants are the wives and children and pay-envelopes. Almost always, there must be some kind of compulsion. The interest in work is usually an acquired quality, like a taste for olives. The mass of men work only because they must.

Choose friends carefully

A young man should be careful in choosing his friends. If he spends his spare time with others of the silly sort, they will

prevail over him and pull him down. It is more likely that they will make him silly than that he will make them sensible. His most useful friends will be those who are a bit above him. So that he can learn from them. Two ambitious young men can be a great help to one another.

Every ambitious young man should give a thought to the meaning of this word—SELF-EXPRESSION. This compound word means two distinct things:

- (1) Developing ability and originality;
- (2) Learning how to write or speak well.

It means the art of getting ideas IN and OUT of the brain. It means to acquire and to express.

I once knew two men—brothers—who were very different. John, as we may call him, was a profound thinker. He was a student, too. He spent all his spare time acquiring knowledge. He was a man of wisdom and high character. But he was inarticulate. He was a poor speaker and a poor writer.

The other brother, whom we may call William, was neither a thinker nor a learner. He had a light, shallow nature. But he was a most fluent speaker and the author of several very readable books.

As you can see, neither of these two brothers possessed the power of self-expression. John had self but lacked Expression while William had Expression but lacked self.

To first become a strong, wise personality, and then to acquire skill in the use of language—that is what makes a man a powerful influence in his trade and his town.

It is a great help to any young man, all through his life, if he learns to write well and speak well. He should develop his powers of self-expression, in writing and on the public platform. If he can make himself one of the spokesmen of his trade or industry, this will do much to give him a place among the Leaders. The art of writing can be learned; so can the art of public speaking. Both are of much value to the young man who wants to extend his influence as widely as possible.

(Courtesy: Psychology)

HISTORY OF GUJARAT

By Harkant Shukla

Gujarat derives its name from the Prakrit "Gurjarratta", i.e., Gurjar Rashtra, and means the land of the Gurjars. The Gurjars are believed to be an immigrant tribe who entered India along with the Huns who settled in Rajasthan.

The Gurjars passed through the Punjab and settled in some parts of western India. These areas came to be known in due course as Gujarat, a name which became popular by about 10th century.

The boundaries of Gujarat have varied at different times of history. Today it comprises Kutch, Saurashtra and the territories between Banes and Damanga. On the west it has a coastline of 700 miles where surge the restless waves of the Arabian Sea, while on the north stretch the desert tracts of Kutch and Banaskantha which screen it off from Pakistan; on the east stands a long range of mountains like Arasur, Aravali, Vindhyaachal and Satpuda, and on the south lies the Deccan plateau which abuts on the coastal plain between Daman and Dahanu. Rivers like Banas, Sabaramati, Mahi, Tapi, Narmada on the coastal plains and Bhadar, Shetrunji and Bhogavo on the peninsular plains water its fertile lands. Except the arid zones of Zalawad and North Gujarat, the rainfall varies between 25 and 50 inches. It has rich forests full of various games, the rarest is the lion which is found in Gir Forest of Saurashtra, the only species found in the whole of Asia.

Pre-historic Culture

The recent archaeological finds at Lothal near Ahmedabad and some sites in Saurashtra tell us the history of Gujarat of 4,500 years ago, the times of Harappa and Mohanjodaro culture. The epics and Puranas tell us how Lord Krishna and Balram evacuated Mathura as the result of Jarasandha's invasions and how they established themselves at Kushasthali, afterwards known as Dwarka.

It is said that Krishna ruled here for nearly 108 years. Krishna's romantic marriages with Rukmini, Satyabhama and Jambuvanti, his fight with Rukmaiyo, Salv and Jambhuvan, his grand reception to Arjun who kidnapped Subhadra, the grim yadavasthali and the tragic circumstances in which Krishna's death took place at Prabhas are some of the memorable Puranic

incidents reported to have taken place in Saurashtra. It is difficult to say whether the archaeological relics of Harappan age at Lothal are of pre-Krishna period or post-Krishna period unless something concrete is discovered at Dwarka or Mathura.

Mauryan Invasion

The early history of Gujarat is full of the unperial grandeur of Chandragupta Maurya before whose mighty hordes the earlier States of Gujarat fell to pieces. Kautilya's "Arthashastra" mentions that Saurashtra was a Ganatantra, i.e., republic, when Chandragupta invaded Gujarat. It is said that a vaishya called Pushyagupta ruled at Junagadh as the Governor of the Maurya emperor in the last years of 3rd century B.C. It was Ashok, grandson of Chandragupta, who left an everlasting memorial of his spiritual empire as mentioned in his famous edicts engraved on the rock at Junagadh. During his time, Yavandraj Tushap was appointed as the Governor at Junagadh indicating that Junagadh was the capital of the then Gujarat.

On the decline of the Maurya empire, there was a Greek incursion led by Demetrios and the evidence of its contact with the Hellenic world is shown by the find of numerous Greek and Roman coins in this region. From the first century A.D. to the beginning of the 5th century A.D. Shakas played a prominent part in the history of Gujarat. Of the Shaka Satraps, known as Kshatrapas, the name of Rudradaman (100 A.D.) stands out forcefully from the inscription on the weatherbeaten rock at Junagadh.

Kshatrap regime was replaced by the Guptas, a dynasty reigning between the Ganga and the Brahmaputra. It was Chandragupta II (Vikramaditya) who conquered Gujarat and issued a new coin the lion-slayer type—a symbol appropriate to show the conquest of regions which were famous for the haunts of lions. His successor Skandgupta has left an inscription (450 A.D.) on the famous rock at Junagadh which mentions how his Governors, Parnadatt and Chakrapalit had repaired the embankment of the lake Sudarshan constructed by the orders of Chandragupta and how it was restored by the orders of Rudradaman after it was damaged by heavy floods.

• Vallabhi Kingdom

As Gupta power declined around the middle of the 5th century A.D. Senapati Bhattarak, the Maitrak general of the Guptas, established himself in Saurashtra with his capital at Vallabhipur. Maitraks of Vallabhi were very powerful and dominated large parts of Gujarat and even Malwa. Vallabhipur not only became famous as the seat of a powerful kingdom but could boast of a well-known university which was compared with Nalanda. Hiuen Tsiang, the famous Chinese pilgrim who visited Saurashtra 640 A.D., writes about a number of Buddhist monasteries and scholars, including Gunamati and Sthiramati at Vallabhipur. Vallabhi was a stronghold of Samonitya sect of Buddhism. King Harshavardhan of Kanauj had married his daughter to Dhruvsen II of Vallabhi and this alliance strengthened their domination—both political and cultural. Some of the copper-plates obtained from Saurashtra and Gujarat give some idea not only of the grants of the Vallabhi rulers but the system of administration and various names of the officers and units under them. This great kingdom of Vallabhi came to an inglorious end as the result of an Arab invasion from the city of the Mansura in Sind.

Chavdas (746-942) who were the vassals of the Vallabhis, held sway over some parts of north Gujarat and became independent with the fall of Vallabhi. Of the eight rulers of the Chavda dynasty, the name of Vanaraj, the founder of the dynasty, stands out most prominently. It was he who founded the capital of Gujarat at Anhilpur Patan which was destined to play a great role in the history of Gujarat.

Art And Literature

Solankis got the Gujarat throne as the result of adoption of Mulraj by the last Chavda ruler, Samantsingh. Mulraj gave generous grants to Brahmins who were invited from different parts of the country and settled them in Gujarat. He established his complete hold over Saurashtra and Kutch by defeating Graharipu of Junagadh and Lakho Fulani of Kutch. Of the other ten rulers of the Solanki dynasty, names of Sidhraj Jaysingh (1094-1143) and Kumarpal (1143-1174) stand prominently, not merely due to their bravery and large-scale conquest but their patronage of art and literature. The sun of glory that was shin-

ing formerly over Ujjain and Dharanagari shone over Gujarat during the Solanki period. The Solankis since the days of Mulraj, were ill at ease with the Chudasamas of Junagadh, a powerful Rajput dynasty of Saurashtra which ruled Saurashtra for nearly 500 years. The story of Siddhraj Jaysingh besieging the Junagadh fort and ultimately capturing it along with Ranakdevi, the wife of the ruler, Rakhenagar, who became sati at Wadhwan, has become a favourite legend of the bards.

Mughal Rule

The long and oppressive reign of Sultan Alauddin Khilji of Delhi witnessed the creation of first Muslim empire in India and among the earliest victims of his fury and conquests was the wealthy and prosperous kingdom of Gujarat.

The period of Muslim domination over Gujarat which began with the downfall of Vaghela rule in 1298, extended for over more than 400 years and ended roughly with the final defeat of the Mughal Viceroy, Mominkhan, by the Marathas and the capture of Ahmedabad by them in 1758. In the beginning, Gujarat witnessed the large-scale demolition of Somnath, Patan and Cambay and the Khilji and Tughlaq sultans of Delhi held their sway by using well-known oppressive methods in Gujarat till 1407, when the powerful dynasty of the sultans of Gujarat established their independent rule. Of the 15 sultans who ruled for a period of 166 years, mention must be made of Ahmed I (1411-1442), the founder of Ahmedabad, and Mahmud I (1458-1511), known as Mahmud Begada, for their long rule during which Gujarat again recovered from the past ravage and plunders.

Most of the sultans of Gujarat were either murdered or poisoned by the rival claimants till Muzaffar III who braved the wrath of Emperor Akbar by refusing to submit to him and seeking asylum in Jamnagar where Jam Sataji, together with Junagadh armies, fought bravely in defence of his refugee guest against the imperial armies led by Kokaltash. Both Gujarat and Saurashtra fell at one stroke after the defeat of Saurashtra armies at Bhucharmori near Dhrol. The Mughals ruled over Gujarat from the time of Akbar's conquest onwards, through their subedars and thanedars, for a period of nearly 185 years during which Gujarat was treated as a district of Mughal empire.

Within a few decades of the death of Aurangzeb, the Mughal suzerainty was smashed by the blows of the growing Maratha power. The House of Gaikwad rose into prominence in Gujarat and in course of time held sway over Gujarat and Saurashtra and then became independent.

Influence of Sanskrit

Sanskrit has always been a powerful cultural force among the people of India and has exercised profound influence on the development of Gujarati language which is a dialect derived from the western Rajasthani or the Gurjari Apabhramsh. Shrimad, the former capital of Gujarat, was a seat of Brahminical learning and it was here that Magh, the great poet, was born in the 7th century. In the same century another poet Bhatti, of Vallabhi, wrote Bhattikavyam. Of the well-known literature of Gujarat of the mediaeval period, Hemchandracharya, Devchandra, Brahladandev, Vijaypal, Rambhadra, Someshwar, Subhat and Merutung deserve special mention. With the fall of Anhilpur and the rise of Muslims, most of the writers left Gujarat and sought asylum in the courts of Rajput rulers in Saurashtra. Since the middle of the 16th century, Jadeja kingdom at Jamnagar was on the march and Jamnagar became a city of learning and art. In the 16th century, Sanskrit poet Shrikanth wrote Ras Kanmudi, a treatise on drama and music. In the field of Sanskrit, mention must be made of Vaninath, Shrikrishna, Keshavji and Jivanram and Shankarlal Maheshwar of Morvi.

Temple Architecture

The ancient Buddhist caves at Junagadh, Talaja, Sana and Dhank in Saurashtra represent some of the early Buddhist architecture and sculpture. Most of the temple architecture that has survived the fury of men and nature is found in Saurashtra at places called Gop, Visavada, Bileshwar, Sutrapada, Than and Khadwar.

The Chalukyan type of architecture is represented by Rudramahalaya at Siddhpur, old Somnath at Prabhas, Modhera sun temple, Navalakha at Ghumli and Sejakpur, the temple at Dabhoi, Kirtitorans of Visnagar and Kapadvanj. The magnificent temples of Delvada at Abu, Girnar and Shatrunjaya which show the degree of perfection attained by the artists, represent

the unique and remarkable progress made in the realm of architecture and sculpture by Gujaratis.

The best that Gujarat had in painting was influenced by the Rajput style. The Jain sadhus had evolved an illustrative style of painting which was done in the manuscripts which were more durable. It was called Granthchitra style and it was Prof. Keshav Harshad Dhruv who brought to light the manuscript of Vasant Vilas which was profusely illustrated in this style. Amongst modern painters Ravishanker Raval, Kanu Desai, Rasiklal Parikh, Somalal Shah and Mangalsinhaji are popular.

Atoms In Medicine

Continued from page 415)

obligation to educate the public as well as to reassure them. We need to be aware that as a result of advanced medical science, life is being prolonged for many thousands of people suffering from diabetes, blood diseases, and other genetically determined diseases and they can now marry and reproduce; that in daily life man accepts the hazards that may come from cigarette smoking, driving an automobile, flying in an aircraft and many other sources. This awareness would help to cultivate a healthier mental attitude towards the medical uses of radiation. However, there can be no doubt that there is need for good judgment in the use of radiation. This perhaps is the only realistic approach to such a complex problem.

Within the framework of controlled radiation at a safe level and in its use, we can be proud of the achievement derived from the uses of the radioactive atom and its energy. In our times this certainly is one of the most exciting developments in modern science.

No man ever became great or good except through many and great mistakes.

—William Ewart Gladstone

* * *

Each day before you begin work, devote ten minutes to thinking "How can I do a better job today?" Ask, "What can I do today to encourage people?" "What special favour can I do for my customers?" "How can I increase my personal efficiency?"

—Dr. David J. Schwartz

Teaching Spelling

By Ruth E. Schofield

Correct spelling, like correct grammar, is important because, the way in which an idea is expressed adds to or subtracts from its status—and that of the communicator.

To give a simple example: The billet-doux from a swain that reads "I luv you verry much" may express a touching sentiment, but the mis-spelling makes the message pathetic or ridiculous rather than pluse-tingling. And, of course, if spelling is too bad, a message becomes virtually incomprehensible.

In modern schools more and more teachers are teaching spelling functionally, and because parents are not used to this method, they have the uneasy feeling that youngsters aren't receiving adequate training in this area.

The functional approach places the emphasis on spelling words correctly in context rather than memorising long lists of esoteric words that have scarcely a nodding acquaintance with an average person's writing vocabulary.

In yesterday's schools, spelling was considered a separate subject, isolated from the rest of the curriculum. Spelling bees were the acid test of spelling proficiency. Contestants took great pride in reeling off jaw-breakers like shibboleth, schismatic, and verdigris. It was all most impressive but about as useful as learning to ride a bicycle standing on one's head.

In today's schools, children concentrate on learning to spell the words they need for their written expression. This approach is combined with developing the habit of using the dictionary for unusual words, and of carefully proof-reading written work. Reinforcing the whole spelling programme are the teachers' concerted efforts to instil in each student the desire to spell correctly in all subject-matter areas.

Learning to spell in English is a difficult art. Silent letters are found in beginning, medial and final positions. The "k" in know, the "a" in weak, and the "b" in comb are examples.

Some sounds are expressed in various ways. For example, the sound of "f" is sometimes spelled "gh" as in cough, "ph" as in phone, as well as "f" itself. Homonyms contribute any number of possibilities for errors.

Another difficulty arises from the fact that we borrow many languages and thereby introduce spelling difficulties peculiar to those languages.

Many spelling errors happen because the flow of thought races beyond the physical capacity to write or think through the spelling of words. With each mis-spelling of a word, wrong habits are begun or practised.

With full knowledge of the difficulties to be overcome, the teacher sets up the following goals:

1. To give pupils a mastery of the words found to be most frequently used in children's writing.

2. To give pupils the skills needed to spell additional words as they engage in daily writing.

3. To provide pupils with the know-how to teach themselves the correct spelling of words.

4. To teach pupils where to look for words about which they are doubtful.

5. To develop in pupils an awareness of the need for correct spelling and the ability to evaluate their own progress in developing spelling skills.

Spelling tests are specifically designed to help teachers achieve the first goal. They include words most often found in children's written work at various grade levels.

Research has found that about 1,000 words account for approximately 92 per cent of children's writing. It is apparent that these words should be taught well and mastered in the elementary grades.

However, no given set of words will adequately fill class-room requirements, since each child has special vocabulary needs. With this in mind, the good teacher gives as much individualised assistance as possible.

The spelling skills needed by pupils include certain phonetic understandings, such as how the sounds of letters are represented, information about syllabication, general principles for changing tenses of words, the formation of plurals and possessives, and an awareness of principles underlying contractions.

Use of phonics in reading provides a springboard to phonics in spelling, but a

positive one only when so taught. (In teaching children to read, however, teachers are careful to avoid directing too much attention to how words are spelled because it is likely to interfere with the development of good reading habits.)

Fixing any skill requires practice, and learning to spell is no exception. Spelling texts usually provide practice exercises, and most teachers supplement these with assignments of their own. Both kinds of practice are designed to provide experience in writing and seeing the words in written form, as well as to make the child examine the words closely by pointing out a silent letter or conformance to or deviation from the usual spelling pattern.

Because spelling is a written skill, teachers emphasise written practice rather than oral. However, few of them think there is any value in the repetitious writing of words, since after the second or third writing, automatic production takes over for thinking.

In many schools, spelling is taught in special periods, but the results are checked in all forms of written composition.

Research has shown that not more than an hour and 15 minutes a week should be allotted to spelling as a special subject or in special periods as part of the language-arts programme.

In teaching new words, teachers make sure that pupils understand their meaning and know how to use them in sentences. Each word is pronounced carefully, used in a sentence, and pronounced again.

Correct pronunciation is very important, because faulty pronunciation accounts for the mis-spelling of many words, such as 'government' for government and 'proably' for probably. Teachers, therefore, give both group and individual practice in learning to hear and say sounds and sequences of sounds.

At the start of a spelling lesson, it is common practice to give a pretest, after which each pupil (generally working on a co-operative basis with another pupil) concentrates on the words he mis-spelled in this test. In the retest, students are responsible only for the words that were missed the first time; although in a final test at the end of the week, everyone in the class is responsible for the entire test.

Spelling bees, as I suggested earlier, are

seldom used today as a testing device because they give the greatest practice to those who have least need of it and because they are not an accurate indication of a child's ability to spell correctly in writing activities.

In summarizing, it should be pointed out that schools have various approaches to the teaching of spelling and that once beyond a basic list of words, differences of opinion exist as to what words to teach and in what sequence.

However, teachers generally agree that the teaching of spelling should be direct, the practice meaningful, and the testing situation similar to actual situations requiring spelling.

Along with the teaching of the phonetic and structural skills, teachers help pupils pick up the know-how to teach themselves new words. The attainment of this objective is probably one of the most lasting results of instruction.

Teachers ask themselves the following questions in order to check on the adequacy of their spelling instruction:

Does the instruction prepare the student to approach learning situations on his own? Does the student think of the sounds and the letters? Does he see certain structural elements? Does he (and this is particularly important in English language) see conformance with or deviation from usual patterns? Does he have the habit established of editing his written work, especially his spelling of words? Is his interest stimulated in spelling and meaning of words?

And they ask an important overall question: Does the student have sufficient motivation? Teachers know that in teaching spelling the psychological approach is particularly important. Once teachers have convinced youngsters that it makes a real difference whether they learn to spell well or not and that they become better spellers, then half the battle is won.

The language teacher can't do the job alone. Teachers of all subjects at all levels must carry on a concerted campaign (emphasising, of course, that spelling is never more important than the thoughts to be expressed). And parents can lend a hand, too, by sensitising their children to the need of correct spelling in the writing they do at home.

Venus--The Veiled Planet

By Alla Maserich

At the nearest point, Venus is only 40 million km. away from the Earth—13 million km. closer than Mars. And yet for very long time we knew less about Venus than about any other member of the solar "Commonwealth". Precisely at the time when it is at its closest to the Earth, it becomes most difficult to observe it, for it gets between the Earth and the Sun and shows as its dark side. We are able to have a look at the illuminated side of this planet only when it is fast moving away from us. Besides, Venus is so thickly covered with mist that even the most powerful telescopes are hardly able to penetrate to its surface.

Because of the elusive nature of Venus, the character of its rotation is still a mystery. The Italian scientist, Schiaparelli, put forward the theory that this cloudy planet always keeps one and the same side turned towards the Sun. This would mean that its period of rotation is the same as its orbital revolution, or in terms of our time—is equivalent to 224 days 16 hours 48 minutes. Many scientists continue to maintain this point of view.

There have been other theories too. Aristarkh Belopolsky, a Russian astronomer, concluded, on the basis of his spectrographic studies at the Pulkovo Observatory between 1903 and 1911, that the period of rotation of Venus was 34.5 hours.

Difference In Temperature

As Schiaparelli claims, if one hemisphere of the planet always faces the Sun while the other is always dark, it would mean that there was a great temperature difference between the two hemispheres and that hurricanes blew constantly.

The latest astronomical findings, however, do not bear out this hypothesis. Radiometric studies have shown that the temperature of the 'dayside' of Venus is 40°—50°C and that of the 'night-side'—23°C. The gap is not too wide, and would suggest that one and the same side of Venus does not remain turned towards the Sun the whole time.

In 1956 astronomer J. Kraus, of the University of Ohio (U.S.A.), established that Venus is a source of powerful radiation in the 11-metre waveband. Radiation inten-

sity varies within a period of 13 days. Considering this phenomenon in conjunction with the Earth's period of rotation, it is possible to arrive at the conclusion that the period of rotation of Venus is approximately 22 hrs. 17 min., almost equivalent to that of the Earth. In this respect Venus is similar to our planet. What about other aspects?

It has long been known that the two planets are very similar in mass and volume. The diameter of Venus is 12,600 km., only 160 km. less than that of the Earth. Its mass is 0.82 of the Earth's and its density 0.84 of the Earth's.

Winter And Summer Too?

Dr. K. Kuiper, an American astronomer, succeeded in determining the poles of the planet and hence the inclination of the Equator to its orbit. This proved to be 32°. V. Ezersky, a Kharkov astronomer, has studied the distribution of the bands of brightness on the disc of Venus. He found out that these undergo regular changes and the only explanation of this could be seasonal variations. When Ezersky began calculating the inclination of the Equator, which could explain the periodicity of the seasons, his final figure coincided precisely with that found by Kuiper—32°. The inclination of the plane of the Earth's Equator is a little over 23°.

One of the most interesting problems in the study of Venus is the "marine problem". Are there seas and oceans on the Venus? Until recently many astronomers did not believe it possible owing to the fact that a large amount of carbon dioxide exists in the atmosphere of Venus. It was thought that if big open expanses of water existed on the surface of the planet, carbon dioxide would be rapidly dissolved in the water. Then the atmosphere would in a geologically brief time be cleansed of the gas which, however, is still observed there. By the way, the same argument has been advanced against the theory that there is vegetation on Venus.

Based on a photometric study of the planet, Academician N. Barabashev, a Ukrainian astronomer, arrived at the conclusion, in 1949, that the greater part of Venus, if not its entire surface, is covered by oceans.

He noticed that the planet was sending out sunflashes which is possible only if the lashes are produced by the clouds veiling Venus, let us say, either because of the presence of ice crystals in them, just as in our high cumulus clouds, or because the sunbeams are reflected from a large expanse of water. It is possible that both these causes operate at the same time.

Atmosphere

A very important aspect of the study of Venus is the composition of its atmosphere. The talk about the physical similarity of the two planets is pointless if it is established that Venus has an atmosphere which cannot support life. Until recently the majority of scientists believed on the strength of spectrographic studies that to all intents and purposes the planet had no oxygen.

At any rate, the upper layers of the atmosphere (its stratosphere) consists almost entirely of carbon dioxide. The oxygen content there is at the most a thousandth part of what it is the Earth's atmosphere.

Not long ago Nikolai Kozyrev, a Soviet astronomer, discovered in the spectrum of the atmosphere of our neighbour an absorption band caused by the presence of some unknown organic molecule. It has been established that this molecule exists in the atmosphere of the Earth. Could not this coincidence prove at least some similarity between the atmosphere of Venus and the Earth?

Barabashev thinks it quite possible. "There would be nothing surprising," he states, "in oxygen staying below the cloud layer, immediately above the surface. True carbon dioxide is heavier than oxygen, but even on the Earth this heavier gas rises with the streams of warm air and remains at a higher level than the lighter gases."

As for Venus, the heat of the Sun is felt twice as strongly there and the same tendency might be even more pronounced on that planet. Also conducive to the same result would, it seems, be the fact that Venus has a magnetic field with an intensity approximately five-fold that of the Earth's, and carbon dioxide, which is diamagnetic, would to a certain degree be repulsed by it.

As for the temperature on Venus, the theory has been advanced that it possesses strong reflecting properties, and that the temperature of its surface is on the average

approximately 11°. If this is so, then in this respect too Venus is very similar to our planet.

The study of Venus is still going on, and it is premature to draw any final conclusions about the conditions existing on its surface. However, the ideas now being formulated by scientists differ greatly from those that prevailed until recently. And if it should turn out that from the point of view of its conditions, Venus, rather than Mars, is the first cousin to the Earth, we shall not be greatly surprised.

—"One might say that if the professional scientist who can make a measurement accurately is worth his weight in lead, and if the scientist who can improve the method of measurement is worth his weight in silver, the scientist who can show that the measurement isn't necessary at all is worth his weight in gold."

—Prof. T.L. Cottrell

* * *

Character is like a tree and reputation like its shadow. The shadow is what we think of it; the tree is the real thing.

—Abraham Lincoln

* * *

"The central fact which dominates the horizon of the 1960's is that it has now become technically possible to eliminate poverty and create a world of plenty by the end of this century. What is short is not the physical supply of material resources in any given country, the real question is whether the skills of a society and its capacity to organise itself for producing plenty are sufficiently advanced."

—Andrew Shonfield

* * *

"In this age of the worship of material possessions, we are all starved of the things which appeal only to the mind and the heart, and have no ulterior motive. Advertisements, politicians, newspapers, people with axes to grind, bombard our minds perpetually because they want us to think and feel along certain lines. What a relief it is simply to stand in a park and hear a young man playing the music he loves—and there be no profit in it but a mysterious lightening of the heart, and a memory to take away."—Rosemary Timperley

Frogmen Farmers Of The Sea Bed

By E. R. Yarham, F.R.G.S.

The biggest problem with which man is faced is how to feed the world's multiplying millions. These have now reached the enormous total of 2,900 million, and every three seconds another two mouths have to be filled. By the end of the century the world's population is likely to be around 6,000 million, double what it is to-day.

Many scientists believe man will be forced to turn to the oceans for sustenance in far greater measure than at present. They see in them an inexhaustible larder capable of providing a significant part of the food needs of future generations.

If comparative size is anything to go by, the food potential of the oceans is, indeed, enormous: whereas the total land area of the world is only about 56 million square miles, that of the ocean covers 141 million. At the present time, however, the food yields of land and water are very much weighted towards the former. The world's fishing fleets land annually a catch amounting to something of the order of 18 million tons of edible fish. But the world's harvest of wheat alone, the primary food grain, is 250 million tons. Yet the food potential of every acre of ocean is probably greater than that of an acre of land. This potential will be realised only when the fish crop is "cultivated" just like land crops, and various species protected against their enemies. It may be possible also to fertilize sheltered parts of the seas in order to increase the yield of fish.

Reaping the Ocean's Harvests

The primary source of food for the denizens of the ocean is plankton, a vast, living, drifting mass of marine plants and animals, some of minute size. Scientists estimate that a typical plankton-producing area may yield four thousand tons of vegetable matter per square mile annually. This compares with 700 or 800 tons a year to a square mile of good wheat land. The food value of plankton is high, on the average 59 per cent protein, 20 per cent carbohydrate, and seven per cent fat. But fish are poor converters of this into food for man. Scientists in the United States carried out studies leading to the conclusion that only one pound of fish per acre was produced for every 88 lb. per acre of plankton. How-

ever, 278 lb. of fish were extracted from each acre, a not inconsiderable figure when compared with beef production on good pasture, some 300 lb. per acre.

Professor Sir Alister Hardy, F.R.S., of Oxford University, recently addressed the British Association on this vitally important subject of exploiting the oceans for food. He said fishermen of the future may be frogmen working tractor trawls sent down from parent ships above. He believes that one day the sea may be treated like a farm. In the same way as the land is now harrowed and rolled in addition to the crops being reaped, so will be the sea, in a century's time. Eventually fishermen will pull devices over the sea floor in order to weed out creatures that take food from more valuable edible fish. It is calculated that if only a quarter of such pests were eliminated, a given area could be made to support 10 times the quantity of fish it did originally.

Before such a desirable state of affairs becomes general throughout the world, a good deal must be learnt about the oceans. Scientists must find out much more about plankton, for instance, how many plants, tiny crustaceans and so on live in a particular area; how many fish there are in specified waters; how rapidly they reproduce; how much of the energy of sunlight is captured by the plants and what fraction remains trapped in the animals. The richest plankton in any of the world's oceans is that found just on the borders of the polar seas, in the regions of melting ice. In the south this is the haunt of the world's most numerous whales. Generally, temperate and cold seas are abundant in plankton, warm or tropical seas being relatively poor. Among the crustacea many species form the food of fish commonly eaten by man—herrings, pilchards, sprats, hake, and so on—and are so abundant that if required, sufficiently large quantities could be withdrawn for human consumption by using fine nets.

Deserts and Pastures of the Seas

The scientists also want to find out why certain parts of the ocean are rich green pastures while others are virtually deserts. American research workers report that the open sea has a limited fertile area caused by the breaking waves (vertical circulation),

which plough up the nutrients, or food substances, from deep water to the sunlit surface zone. Desert areas exist because certain ocean regions do not have the benefit of this fertilizing process and there is too little plant life to support much animal life. These desert parts of the ocean could become green pastures, the researchers suggest, if the deep waters containing dissolved nutrients could be artificially induced to rise to the sunlit surface to fertilize the water. For example, a nuclear reactor placed at the sea bottom would warm the water around it. This warmed water would rise and carry the nutrients with it to the surface, creating a fertile area.

This research, incidentally, casts light on the question as to how a deep-sea fish, such as cod, inhabiting dark parts of the ocean, obtains stores of sunlight, which charge its oil with Vitamins A and D. The cod feeds on the squid, which in turn feeds on plankton, which possesses in marked degree the power to absorb sunlight. Thus the light is carried to the ocean bed, to be recovered by the cod. So that cod liver oil is, almost literally, bottled sunlight.

Professor Hardy is of the opinion that the open oceans are far too big to be fertilized or manured with phosphates, but there are considerable possibilities of increasing the production of sea food by cultivating the edges of the sea, particularly areas partially enclosed by land, such as bays, estuaries, lagoons and channels, protected from the open seas by barriers of islands. The quantity and quality of such species as oysters and clams could be increased under controlled environmental conditions by enclosing these inner waters with dykes. Scientists believe that this would result in a much higher production of animal protein per acre than is obtained even on enriched farmland. Coastal waters have been farmed for centuries in a few regions, notably south-east Asia, and more recently in Norway. Greater improvements could be made, however, if modern technology were brought to bear on devising economical fertilizers; on developing methods of controlling predators, parasites and diseases; and on the production of particular strains of organisms to be cultivated.

Mortality Rate of Mackerel

It is certain that if the yield of the oceans is to be raised, fish stock will have

to be protected from its enemies. The average mortality rate of a fish like the mackerel, to quote only one species, is incredibly high. It is reckoned that fewer than 10 in each million survive to reach a two-inch growth. Professor Hardy said that the hope of adding to fish stocks had been increased recently by the successful rearing of young plaice in nursery tanks until they were past the stage at which the highest mortality occurs. Ways have also been devised of transplanting millions of young fish from one area to another by using ships with specially-fitted tanks. This could yield a handsome profit to the industry, but such farming has not been possible yet, because no one nation wishes to put in the capital when all other nations are reaping the benefit. Professor Hardy looks forward to the time when mutual need will bring closer co-operation.

One succinct fact sums up the necessity of research in the sphere of sea farming. According to experts, the "science" of fishing to-day has a standard equivalent only to the level of agriculture in the year 1700. (UNESCO)

Teachings of Mahatma Gandhi

(Continued from page 432)

identity. The relation between God and the individual soul is that if the individual shatters the chains of egotism and melts into the ocean of humanity he shares its dignity; on the other hand if he feels that he is something, he sets up a barrier between God and himself. . . . to cease feeling that we are something is to become one with God."

This great truth, the fundamental unity of all life, a principle far higher than that of the mere brotherhood of man, makes man not the lord but servant of God's creation. The unity of soul and its nature lead to another conclusion of great significance to his philosophy. The soul is the Godhead within man; it is self-acting; it persists even after death; its existence does not depend upon the physical body. Hence whatever happens to one body must affect the whole of matter and the whole of spirit. That is why if one man gains spirituality, the whole world gains with him, and if one man fails, the whole world falls to that extent.

THE STATE HONOURS THE WRITER

The modern Indian writer, unlike his predecessor, can aspire to a number of incentives as well as appreciation and recognition under State auspices. Among these, the annual awards given by the Sahitya Akademi to works of outstanding merit in Indian languages have come to occupy a unique position.

Not only the award (a cash prize of Rs. 5,000) confers on the writer a coveted national honour but also attracts the attention of literary men and lovers of literature from other parts of the country to his creation.

At a simple function in New Delhi on March 26, 1961, nine leading writers received the awards for 1960 at the hands of Shri Jawaharlal Nehru, President of the Akademi and an eminent author whose writings are distinguished by an elevated literary style no less than the message they convey.

The books for which the awards were given relate to the period 1957 to 1959. Works in 16 languages—14 languages mentioned in the Constitution plus English and Sindhi—are eligible for the honour. So far 46 literary creations in different languages have been thus honoured.

The Sahitya Akademi, one of the three national bodies set up by the Government of India to promote activities in the realm of literature and the arts, provides a forum for men of letters in Indian languages to come together and understand the currents and trends in their respective literature.

The absence of such a forum was felt for a long time. Despite the similarity in the background and the experience of writers in India comparatively little is known about the literary achievements in one language by readers in other languages. Even the educated and the literary elite are often unaware of the literary trends and the creative activity in other languages save a few outstanding names. No doubt efforts have been made by individuals and some organised bodies from time to time to present the best in the literature of other languages in translations.

One of the important activities of the Sahitya Akademi is to present literary works from different languages to the large Indian readership as a whole. Efforts in this field are publications like "Contem-

porary Indian Literature", a symposium in English on the contemporary literature of the major languages; "Contemporary Indian Short Stories", being a collection of select short stories translated into English; and "Bharatiya Kavita". The last named is a series of collections of poems from different languages transliterated in the Devanagari script and translated into Hindi.

At the same time more than 100 Indian and foreign classics have been translated into different Indian languages. Critical editions of Kalidasa's works are on the publication schedule of the Akademi. Anthologies of literature in Indian languages are also included in the future publication programme.

The annual awards of the Akademi provide a fillip to the growth of Indian literature and promote high standards of creative writing.

This year's awards have gone to:

Kangrechar Kanchiyali Ra'dat (Assamese) by Shri Benudhar Sharma (b. 1896) who has made his mark as an essayist, biographer and historian. The present work is an account of the role of Assam in the freedom movement, and particularly of his own village, Charing, which was one of the important centres of political activity in those days. Written in chaste prose, the work is as remarkable for its literary quality as for its historical interest.

The Guide (English) by Shri R. K. Narayan (b. 1906) who is well known in India and abroad as a novelist and short story writer of distinction. **The Guide** deals with a pattern of life in Malgudi, a dear little place somewhere in South India, familiar to all readers of Narayan's other novels. Malgudi is located in no map of India and therefore may be found everywhere. The author's gift of characterisation and vivid descriptions, his delicate humour and keen sense of irony, free of bitterness or morbidity, make this book as delightful as it is stimulating.

Sharvilak (Gujarati) by Shri Rasiklal Parikh (b. 1897) well-known Gujarati playwright who has made significant contribution to the Gujarati drama and stage. **Sharvilak** is a five-act play with its theme drawn from two Sanskrit classics: **Mrichhakatika** and **Dauidracharudatta**. He has treated the plot in an entirely new way, thus making it an original creative work.

Kala Aur Burha Chand (Hindi) by Shri Sumitranandan Pant (b. 1900), eminent Hindi poet and one of the leaders of the Chhayavad school of Hindi poetry. This is a collection of Shri Pant's latest poems in which he has boldly experimented with new modes of expression and has given voice to a new spirit of hope and transformation. Mainly concerned with man's spiritual quest and his moral and aesthetic aspirations, these poems seek to convey glimpses of a beyond which is always there and yet not here.

Dyava Prithivi (Kannada) by Shri V. K. Gokak alias Vinayak (b. 1909), distinguished poet, playwright and critic. **Dyava Prithivi** is a collection of two long poems **Neerada** and **Ilagita**. The first is a symbolic picture of the cloud as viewed from the earth, and the second an equally symbolic view of the earth as seen from the sky. The two poems together present the poet's conception of man's evolution and his future.

Sundarikalum Sundaranmarum (Malayalam) by Shri P. C. Kuttikrishnan, alias Uroob (b. 1915), a leading novelist and short story writer in his language. The work is a novel depicting the social life in Malabar during the period between the two world wars. The author has given an accurate picture of a society in transition and has brought out vividly and with the help of a large number of characters, drawn with skill and conviction, the juxtaposition of ancient forces in leav with the emergence of new incentives of progress.

Yayati (Marathi) by Shri V. S. Khandekar (b. 1898), one of the foremost writers of fiction in Marathi. **Yayati** is Khandekar's latest novel and re-tells the age-old story of the mythological King Yayati who in his longing for eternal youth sought to borrow the vitality of his own son. The author has given this traditional tale a new meaning and significance, highly relevant in the context of life today. If Yayati stands for man's incessant pursuit of his desires, Kach represents his search for intellectual joy and the power to make humanity happy.

Natyasastramu (Telugu) by Shri Ponangi Sriram Appa Rayu (b. 1923) a distinguished playwright. The award winning work is a complete translation of Bharata's **Natyashastra** and Abhinavagupta's commentary on it, the first of its kind in Telugu.

The work is more than a mere translation. The author has taken great pains to make the work comprehensive by giving copious notes and cross references from various other sources, besides, attempting a comparative study of the Western and Indian dramaturgy.

Gul-i-Naghma (Urdu) by Shri Raghu-pati Sahai, alias Firaq Gorakhpuri (b. 1896) a leading poet of Urdu. This is the latest collection of the poet's works and represents the creative achievement of a life-time. Here are put together those ghazals, nazams and rubaiyat of the poet which have won him wide popularity in Urdu literature and have influenced, not a little, the modern trends in Urdu poetry.

"There are lots of new developments in my line of research. One, for example, in comparative chairmanship. This is the study of how different types of chairmen get their own way by different methods. One I'll instance is confusionism. The confusionist chairman is one who allows all members to talk simultaneously on any topic for twenty-five minutes, and then at the end of it says: "Well we all seem to be agreed on item two—we'll now pass on to item three." — **Prof. Northcote Parkinson**

* * *

The three purposes of clothes are to keep out the weather, to attract other people, and to establish your position in society. Even the sweetest or most intellectual of women, when she chooses her autumn suit, is demonstrating something or other.

* * *

There is nothing so degrading as the constant anxiety about one's means of livelihood. I have nothing but contempt for the people who despise money. They are hypocrites or fools. Money is like the sixth sense, without which you cannot make a complete use of the other five.

—**Somerset Maugham**

* * *

—“An assurance that ultimate values of goodness and beauty can never be shaken by the pursuit of truth, wherever it may lead, is perhaps the sign of a robust faith than is shown by recoil from every new and seemingly disturbing fact.”

—**Sir Cyril Hinshelwood**

Economic Cooperation Between USSR And India

India and the USSR have concluded long-term agreements on economic and technical cooperation in the construction of large industrial and other projects in India. These agreements involve a sum of 4.3 billion rupees including 3.8 billion rupees in the shape of long-term credits.

Bhilai Works: One of the main projects built with Soviet aid is the Bhilai iron and steel works. The construction of this works has created the prerequisites for the establishment of a powerful metallurgical industry in the public sector. The construction of the Bhilai works was carried out in record time, and the rated capacities of the coke and chemical plants, blast furnaces, open hearths and rolling mills were reached quickly and efficiently.

In the course of the construction of the works, and later during its operation, the Soviet specialists working at Bhilai shared their knowledge and experience with their Indian colleagues. As a result, thousands of Indian engineers and workers have been trained on the spot. On February 4, 1959, the first blast furnace of the Bhilai plant was commissioned.

The construction of the Bhilai plant is over and it is already engaged in full-scale production. From the time the first units of the plant were commissioned to the end of January, 1961, the Bhilai works has produced 1,148,000 tons of coke, 1,055,000 tons of pig iron, 398,000 tons of steel, 327,000 tons of merchant steel, 2,031,000 tons of iron ore and 746,000 tons of limestone. Besides, a number of chemical by-products too have come off the plant in large quantities. The fact that all the units of the plant have been commissioned, and are functioning efficiently, ensure the smooth and uninterrupted operation of the plant at its rated capacity.

Aid for India's Oil Industry: In order to meet India's growing requirements of oil without having to rely on imports, and save colossal amounts of foreign exchange, the Government of India decided, a few years back, to start oil and gas exploration in the public sector.

In 1958, with the help of Soviet specialists employing Soviet equipment, an oil field was discovered at Cambay, the reserves of which are estimated to be 20 million tons. The search for liquid fuel yielded further result when in 1960 large deposits

of high-quality oil, estimated at 50-55 million tons, were discovered at Ankleshwar. Besides, oil prospecting in the area of Rudrasagar, Assam, has shown promising results. The discovery of rich oil fields in India, as a consequence of fruitful co-operation between the two countries in this sphere, has made it possible to start the construction, with Soviet aid, of a large state refinery at Bārauni with the capacity of 2 million tons of crude oil per year. In order to promote and strengthen the co-operation between the two countries in this sphere, an agreement was signed, on June 16, 1960, under which India will receive technical aid from the Soviet Union in the exploration and production of oil and gas. The total value of this aid is estimated to be 330 million rupees.

Heavy Machine-Building Plant: The scope of Soviet aid to India in the field of engineering industry has grown considerably in recent years. The construction, with Soviet aid, of the first heavy machine-building plant at Ranchi will be of paramount importance to the Indian economy, as it will lay the foundation for a powerful heavy machine-building industry in India. This plant will manufacture diverse and most up-to-date machinery. It will have the rated capacity of 80,000 tons of finished machinery per year. The multi-purpose character of this plant and its equipment will make it possible to manufacture here all kinds of heavy machinery for use in the iron and steel industry, coke oven and chemical by-products equipment, blast furnace, steel-making, crushing and grinding, rolling mill, mining and press-rolling equipment, excavators, heavy oil drilling rigs, spare parts and various kinds of parts for heavy machinery and installations. Needless to say, this plant will be the first of its kind in India.

Coal-Mining Machinery Plant: The Soviet Union is also providing aid for the construction of the coal-mining machinery plant at Durgapur with the capacity of 45,000 tons of finished machinery per year. The plant—the first state coal mining machinery plant in India—will be of vital importance for the mechanisation of coal mines in India; the equipment produced at the plant will make it possible to mechanise the extraction of coal to the extent of about 8 million tons a year—which is al-

most equal to the annual increase in the output of coal under the Third Five-Year Plan.

Heavy Electrical Plant: The construction of a heavy electrical engineering plant with Soviet assistance will be of vital importance to India's national economy. The plant will manufacture large electrical machines for metallurgical, engineering, mining and other plants. As, Mr. Manubhai Shah, India's Minister of Industry, stated, the output of this plant, together with the output of two other plants which are being built with the help of the U.K. and Czechoslovakia, would meet 60-65% of India's requirements of heavy electrical equipment in the Third Five Year Plan period.

Precision Instruments Factory: The construction of the precision instruments factory, envisaged in the agreement signed on February 12, 1960, will enable India to take the first steps in setting up a modern instrument-making industry.

Electrical Power Plants: Another sphere in which the Soviet Union is helping India is the construction of power plants. The thermal power station at Neyveli, Madras, will have a capacity of 400,000 kw and, since it will be using cheap lignite fuel locally available, will be able to generate electricity at a very low cost. The two other thermal power plants at Onda in U.P., and at Korba in M.P. with the capacity of 250,000 kw and 200,000 kw, respectively will augment the power resources of India, and will make it possible to supply electricity to a large number of industrial enterprises as well as to urban and rural centres.

Pharmaceutical Industry: The Soviet Union is also helping India to set up a modern pharmaceutical industry. It has given a credit of 95 million rupees to enable India to set up four large plants in the public sector for producing essential drugs. One of these—the antibiotics plants with the capacity of 300 tons of products every year—will be set up at Rishikesh, Hardwar, another—the synthetic chemical pharmaceutical plant with the annual capacity of 850 tons—will be established at Sanatnagar. The phyto-chemical unit at Hunar in Kerala, with the capacity of 764 tons, will manufacture drugs from medicinal plants. The main surgical instruments plants, having a total annual capacity of 2.5 million instruments, will be established at Madras.

It is expected that with the implementation of these schemes, the regular and constant supply of essential drugs at reasonable prices will be assured. It may be noted here in this connection that the optical glass factory with the annual capacity of 300 tons—the first of its kind in India—is also being built with Soviet aid.

Bombay Institute of Technology: The Institute of Technology at Bombay is getting free technical assistance from the USSR both directly as well as through the UNESCO. The Soviet Union is providing equipment to the Institute and is also sending its lecturers and professors to work on its staff.

Suratgarh Farm: The Central Mechanised Farm at Suratgarh, set up in 1956 with the agricultural machinery and equipment presented by the Soviet Government to the Government of India, has made great headway in the reclamation of barren land and is harvesting stable, high yields of the main agricultural crops. At present the construction of the Farm's workshops, the equipment for which too was presented by the Soviet Government, is nearing completion.

Six New Projects: Apart from the projects mentioned above, six more projects, covered by the agreement signed on February 21, 1961 at New Delhi, are to be launched with Soviet help.

The projects are a 430,000 kw hydro-power station at the right bank of the Bhakra with four 120,000 kw. turbines; an oil refinery in Gujarat which will process two million tons of crude oil into fuel per year, together with a power station for the refinery; a coking coal dressing plants with an annual capacity of three million tons of coal in Bihar; a refractories plants near Bhilai with an annual capacity of some 125,000 tons of magnesite and fire-clay products, the prospecting and extraction of oil and gas by the State Oil and Gas Commission in Cambay, Ankleshwar and other places, as well as the drawing-up of a technical-economic report for building a compressor and pump engineering works.

This agreement, which covers all-round technical assistance in building these six major projects like the previous agreements, is of great importance for India's industrialisation and the fulfilment of her Third Five-Year Plan.

Teachings of

MAHATMA



GANDHI

Q. "Though God transcends the intellect, it is possible to reason out the existence of God to a limited extent." Amplify this statement of Gandhiji.

Ans. That which is beyond reason is surely not unreasonable. To ask anybody to believe without proof what is capable of proof would be unreasonable. But for an experienced person to ask another to believe without being able to prove that there is God is humbly to confess his limitations and to ask another to accept in faith the statement of his experience...without faith this world would come to naught in a moment.

Gandhiji considers the senses and reasoning as inadequate media of apprehending the Absolute Reality. God, he says, "Is indescribable, inconceivable and immeasurable." God transcends the senses and the intellect. "We must ever fail to perceive Him through the senses because He is beyond them. We can feel Him, if we will but withdraw ourselves from the senses. The divine music is incessantly going on within ourselves, but the loud senses drown the delicate music." "The intellect, if anything, acts as a barrier."

But though God transcends the intellect, it is possible to reason out the existence of God to a limited extent. What Gandhiji means by this statement seems to be that though intellect has its limitations, it leaves us free, as Kant also held, to believe in the existence of God. One of the arguments that Gandhiji gives is that the universe cannot be interpreted without postulating a transcendent reference.

Moreover, the method of religion, Gandhiji points out, is not far different from that of science. Scientific truths can be verified only by following the prescription given for comprehending the facts which are taken for granted. Thus we cannot understand electricity except by the Galvanometer test.

It is unnecessary to enter into a discussion of these reasons. Kant has shown that understanding is incapable of comprehending the noumenal order and that all

arguments employed to prove the existence of God are defective. Gandhiji himself believes that realization is impossible through the senses and reason. Reason can only demonstrate the rationality of the conviction about the existence of God when this conviction arises through faith.

To sum up, Gandhiji insists that the Divine is the central truth in man, that firm faith in the Divinity or God is indispensable for good life as well as for the use of non-violence, resistance, and that other allegiances and obligations are binding insofar as they are consistent with the basic loyalty to truth. No one will, we hope, dispute that Gandhiji is extremely catholic, in his conception of God. God is to him only another name for the Reality, the Truth, the Law, the Harmony that pervades the universe. His view that belief in God and soul is a matter of faith has the support of saints and prophets.

Q. "Though he sometimes uses the language of a theist, Gandhiji is, in his ideas about God, extremely catholic." Justify this statement.

Ans. We know how Gandhiji identifies God with Truth. He also identifies Him with Love, Ethics and Law, Conscience, etc. God, he once said, is "faith in oneself multiplied to the nth degree." "You believe in some principle, clothe it with life, and say that it is your God. . . I should think it enough."

To Gandhiji there is no antithesis between God and man. The soul is the only reality in man as well as in the lower order of creation. It transcends time and space and unifies all apparently separate existents. "I believe", he writes, "in absolute oneness of God and therefore also of humanity. What though we have many bodies we have but one soul." "I believe in adwait I believe in the essential unity of man and for that matter of all that lives." Gandhiji also subscribes to the belief that human beings are working consciously or unconsciously towards the realization of spiritual

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STUDENTS' EMPORIUM

BANISH FEAR OF FAILURE

A sudden fright sets our hearts beating faster: our hair bristles: all our senses are alert. This animal reaction results in surplus energy being stored up for the emergency in which we shall have to fight or run.

In the dark primeval forests, when primitive man lived in caves, surrounded by ferocious animals, this alerting mechanism was his chief means of survival.

Our brains have now developed into complex structures of millions of cells capable of exchanging electrical impulses at the fantastic speed of five hundred per second.

The human brain has become so efficient that we can anticipate danger by a process of reasoning long before it occurs. However, if our imaginations are over stimulated, our reasoning becomes faulty. We fear that our actions will result in failure. We are unable to take positive action.

This is the fear that saps our confidence. This is the fear we must banish.

Recent brain research tends to show that successful actions give a personal boost to the feeling part of the brain. Thus the memory of a success will encourage us to repeat the success. We must use this fact to build up our confidence. Happy memories breed confidence. Let us keep the picture of our previous accomplishments always in our minds.

Suppose there is a complicated calculation to be done. First, break the operation down into simple steps. Now, have a clear picture of their sequence before starting the work. A confused jumble of images ruins confidence.

Also, we must have an interest in the thing we are doing. Find the fascinating aspects of the subject.

Never pick up a textbook and try to read it straight through from start to finish. Rather turn over the pages gently until something arouses our curiosity. Without realising it, we are reading back through

the book trying to pick up the threads. In no time many facts have been assimilated without any conscious effort on our part.

Many of us are afraid to tackle new and unfamiliar paths of learning. We are convinced that our minds are incapable of steering us through the unknown territory.

In a recent letter to a newspaper a lady said that television had given her a new interest in subjects which she had thought were too difficult for her to tackle. The clear and logical presentation of the subjects on the screen had shown her that they were not so complicated after all. She had found a new confidence in her own ability and is attending evening classes several times a week.

Trying to teach others to gain confidence in themselves will help to strengthen our own self-confidence.

We should never allow mistakes to cast doubts concerning our ability. It is more logical to see them as a means for helping us to avoid future errors.

Environment plays a great part in our personal development. Being in the company of intelligent people will help to increase your knowledge. You will find that really clever individuals are keen to talk about their own subject because they are interested in it. Remember that a good conversationalist is the man who can listen attentively to the other people. The ignorant never learns because he tries to do all the talking.

Increase of knowledge will make your fear of failure diminish—rational thinking will banish it for ever.

(By V. C. Lamb in **Psychology**)

* * *

MY TIP FOR SUCCESSFUL STUDY

For a brief while before I settle down to study a subject, I try to bring before my mind some cogent reasons why I really want to know about it.

This helps a lot to make concentration and study more effective.

I study with a pencil and lots of writ-

ing paper. As each selection is studied, I write down what I can recall, proceeding thus until the allotted amount is covered.

Then I go over the whole thing quickly, comparing my versions with the text, and noting especially any important ideas or facts omitted.

Finally, I write my version of the whole section and leave it for a few days before going back to compare with the original. This entails a lot of activity, and I believe that just such movement enables me to concentrate better.

I find that planning my study and timing myself is also a good way of helping concentration. Any tendency to idle, day-dream or go wool-gathering is guarded against by the time-piece ticking on the tale reminding me to keep marching on with the task.

Reading a stimulating passage from a favourite book or magazine is another way I use for getting into the mood for concentration and study.

When you learn from experience that a good bout of concentration and study is good for you both mentally and physically, it is easier to get in the mood—(P.F.G., Londonderry, Northern Ireland.)

A YEAR ago I had to sit for an examination. To improve my ability to study and concentrate, I did two things.

1 In setting out to correct my mistakes in studying and concentration, I did not make any excuses for myself. I stopped grumbling.

"The noise is terrible; the room is uncomfortable; the books are dull; the light is bad; the subject is uninteresting; the prospects of my passing are slim."

These, and other excuses, may have been the truth, but I realised that to improve my methods of studying and concentration, my attitude had to be: "I am going to study and concentrate in spite of every distraction."

2. I found no difficulty in concentrating on what I really desired to know. The resistance and boredom came when I tackled examination subjects which required real mental effort.

So to help myself study, I reminded myself of what I had to gain by passing this examination: increase in pay, more

varied and interesting work, more self-confidence and self-respect.

I was able to obtain twelfth place out of 125 candidates by using these two methods.—(Anthony Cini, Hamrun, Malta.)

I HAVE found that making notes as I go along has helped me a great deal.

Then when the actual study period is over, with my notes before me I write an essay on what I've studied that day.

I find I'm able to remember far longer once I've written something down myself.

I have also found I need absolute quiet and to be at peace within myself. So I pray a little at the beginning and this quietyens me.

Thus I am able to control my thoughts and give my entire attention to my lesson.

Being certain of the goal in view makes it easier to concentrate, too.—(Mrs. Winifred Malcolm, Livingston, Northern Rhodesia.)

I HAVE always felt that I have everything except the determination to sit down and work with attention and concentration.

So, a few months ago, I consulted some of the top ranking students that I know. I asked them for the secrets of efficient study.

They gave me the following advice.

1. Sit down with a strong intention to finish certain portions of study within a specified time.

2. Imagine that you are facing an examination daily, and work for it with full attention.

3. Read what you have to study repeatedly and with close attention.

4. After every reading, stop and recall the important points.

5. Recite facts aloud to yourself.

6. If you can't get something into your head, write it down two or three times on paper.

For the past five months, I have been putting these points into practice. I feel that they have considerably improved my studying.

Auto-suggestion, on the lines of "I like my subjects, and I am learning to study with full attention," has also helped me.—(R. Madhav, Madras, India.)

I WAS disappointed when I did not pass in arithmetic in an important examination. At first I thought that I never would

pass this test. But then, with only small confidence I decided to try some solid-work—and get through.

This determination laid the foundation of definite improvement in my ability to study effectively.

The first thing I did was to join forces with another girl who was in the same position. We planned to work systematically.

We put in two separate hours daily. Thus, at a fixed time in the morning, and again in the evening, our sole concentration was on arithmetic.

It was difficult at first. But gradually we began to enjoy the work. The place we chose was secluded. We had the help of books and teachers.

The thought that buoyed me up was that "Hard work never goes unrewarded." It was proved true when we took the examination again. We passed with credits.

This was a good experience for me. Henceforth, I got used to concentrating fully on my subject as desired.

Even if I am temporarily unsuccessful, I keep working away with the firm belief that hard work wins in the end.—(Miss Nanda Handurukande, Ceylon.)

* * *

HOW TO HAVE A GOOD MEMORY

If you are among the lucky few who were born with an excellent memory you need not read this article. If you have but to look at a printed page to remember every word on it—congratulations! You have a skill for which millions of men and women envy you. It is a skill which may be innate but which accordingly to the experts can be acquired with painstaking practice.

Most of us, though, would be satisfied with a memory which would help us recall the important things of everyday living. The shopping list which has been left at home, the letters which were not mailed in time, the house key which has been mislaid, all these can be extremely annoying. If you meet an old acquaintance on the street and cannot think of her name it can be downright embarrassing. And if anniversaries, birthdays and other festive occasions have a way of "slipping" your mind, you may be in for a great deal of trouble."

No doubt about it, much of your popularity, much of your social desirability de-

pends on this ability to remember. Like other skills, the art of remembering can be learned.

Psychologists, who have dealt with all kinds of mental quirks from total recall to total forgetfulness, or amnesia, tell us that the most important requirement in memorising is that you be interested in the subject to be grasped. A child who is particularly interested in history will have no trouble remembering what he has learned in history class while geography may go in one ear and out the other. Facts which were absorbed by an interested mind will be retained for decades, stored away safely in a compartment of the brain where they can be found easily, while "boring" incidents are dropped or stored away where they cannot be found.

To be interested in a subject or person is so essential in remembering that psychologists have drawn conclusions from the fact of forgetfulness. Suppose you have met a woman several times at meetings. Yet every time you see her you cannot recall her name; it simply slipped your mind. Usually you don't have this trouble; if you have heard a name a couple of times it generally sticks. All right, say the psychologists, the fact that you do not remember shows you have no interest in this woman. More than that, you don't even like her, something about her, her manner, her looks, her bearing, whatever it may be, strikes you the wrong way. Your memory, which is your best friend, co-operates immediately in letting you forget all about the woman, including her name. We speak here of "resistance," an unacknowledged desire to forget, to have nothing to do with this particular person.

The same lack of interest goes for anniversaries and birthdays which thoughtless husbands may forget. If they have reason to be annoyed with their wives they may use this device to unconsciously punish them, by forgetting what they should recall. No wonder so many scenes centre around forgotten anniversaries; women somehow feel that these are the results of a lack of interest—no matter how much their men may protest.

All right then. You forget what you don't want to remember—be it people or incidents. But often you have to remember whether you want to or not. If you are a lawyer you cannot choose to recall

only those clients you like and forget the names of those you don't like. The most important point in this situation is that you can't be expected to recall what you never got straight in the first place. The rapidly mumbled name will hardly make any lasting impression. Nor will a handshake mean anything else, therefore make sure that you have the facts you want to recall. If you didn't get the name in the first place don't hesitate to ask. Or, as you shake hands you may honestly admit you didn't catch the name tossed to you by your busy hostess. The average person will be only too glad to repeat his name, even to spell or write it for you.

So you've got the name--and it was pretty simple at that. Now make sure you attach it to rightful owner. To be calling Mr. Mack by Mr. Miller's name is even more insulting than to admit you have forgotten his name completely.

Here you need practice. You have seen the face, you have heard the name. Now make sure of retaining the facts. A good trick is to use the name right after you have heard it. As you shake his hand, say, "Glad to meet you, Mr. Miller," and watch his eyes light up at the mere mention of his name.

Now the face. Get a close look. Determine whether it's square, oblong, round. How about the colour of his eyes? How about his hair? You will be surprised how little you notice at first glance unless you make a very conscious effort to look and to observe. Study his features as closely as you can. Then turn away, and mentally draw a picture of his face. Finally check and see how closely you recalled his features. You may find that at first you were wide off the mark, that you overlooked important features and over-emphasized insignificant ones. But with practice comes skill. Soon it will be only a matter of seconds before you have memorized an individual's face and features and associated them in your mind with his name.

Finally, if you have a chance try getting some of your data on paper. Once you have written it down and seen it spelled you will have less trouble in remembering. Visual aids are extremely important props to your mind, as school-teachers who use movies and drawings have found out.

These are the rules for names and faces. But what about the forgotten shopping list or the house-key left in the wrong hand-bag? Again you may have to trick your mind into remembering. Just as you are about to leave the house, do a mental review of what you are planning to do. The store is your first stop. What will you need there? The shopping list, of course. Then the post office. Have you got the letters? Finally, home—how about the house-keys? Get order into your mind and educate yourself to do this quick previewing every time you go out. It takes only two minutes at best, but be sure you concentrate and visualize what you are going to do during those two minutes. And it may save you hours in wear and tear afterwards.

If you are planning an elaborate dinner for guests, again the best way to jolt your memory into obedience is to go through this step-by-step procedure. First course, second course, dessert, coffee, cream, sugar. Make a list of what you need in this order and discipline your mind to be neat. Soon it will co-operate with you. It's all a matter of training.

If all these devices still don't work for you, you may simply need a rest or a change. They may restore to your mind the elasticity it needs to function best. Then set out to train yourself patiently and conscientiously. The results will amaze you.

As Dr. Karl Menninger, points out: "All intelligent people have good memories." It may not be functioning as it should because of neglect or because you simply have not learned how to put it to best use. Make use of your assets and discover how much more efficient, popular and generally happy you will be.

—Elsie Nolan

* * *

BEWARE OF MIXED DOUBLES. . .

Words such as **everybody**, **nobody**, **either**, **neither**, are followed by a singular verb, as in the sentence: "Everybody has his good points." Note that the possessive adjective (his) is also singular. It is not necessary to say: "his or her good points" as the masculine form covers both.

It is generally accepted that such words as **crowd**, **company**, **number**, **enemy**, can take either a singular or a plural verb, depending on the sense in which they are

being used. Compare: "The number of casualties is high" with: "A number of people were approaching." Then consider: "The crowd were shouting and singing" (sense of many people) and: "The crowd was surging forward" (sense of one vast mob).

Be consistent when using such expressions as **sort of** and **kinds of**. Make sure that you have them either all in the singular or all in the plural. For example, you can say: "This sort of book interests me," or: "I do not like those sorts of remarks" (better rendered as "remarks of that sort"). What is quite incorrect is to say: "Those sort of remarks".

Most words ending in **-ics**, meaning "the art or science of", such as mathematics, physics, politics, are treated as singular. "Politics is a precarious career."

Sometimes two or more subjects joined by **and** can take a singular verb if they represent a single idea, e.g., "Eggs and bacon is the favourite English breakfast."

... AND DOUBLE NEGATIVES

Remember that in the majority of cases two negatives in the same sentence do not make for emphasis but simply cancel each other out. It is never right to say: "He didn't give me no message." The statement should be either: "He didn't give me a message" or "He didn't give me any message."

This rule applies not only to all the obvious negative words beginning with **n—** **no, not, none, never, nobody, nowhere**—but also to words such as **hardly** and **scarcely**, which have a negative force too. You do not say: "I didn't hardly understand him" but "I hardly (or scarcely) understood him."

Do not forget that **neither** is always balanced by **nor**; or belongs with **either**; e.g., "He gave me neither assistance nor encouragement," but "He did not bring either luggage or papers."

It is sometimes a good idea to emphasise a negative by switching it to the beginning of the sentence, as in:

"Not for a moment did I hesitate."

There is one way of using a negative to stress a positive statement: as in: "He owed me no small sum" (i.e. a large amount) and:

"They helped me not a little" (i.e., a great deal).

By combining these last two ideas, you can obtain a sentence such as: "Not for nothing have I travelled all this way."

This is a correct use of two negatives making a positive.

GUIDE TO CAREERS: THE DRILLER ROCK

For ages together man has been trying to find and use minerals. This has not been an easy task for him. Many people have suffered great hardships and many others have lost their lives in this task. But still man continued his searches for hidden treasures of nature. The results of some of these searches have been very useful. Valuable deposits like iron, gold, mica, coal and fuel-oil have been found deep underneath the earth. The desire to find out more and more things has increased and many people are now engaged in this work.

With the progress of science, man has found out simpler ways of bringing out mineral deposits. There are three stages in this work namely, exploration, i.e. searching for mineral deposits, drilling, i.e. digging holes in the earth to the depth where such deposits are found and extracting or taking out such mineral deposits. The geologist, with the help of certain instruments and maps, comes to a tentative decision as to the presence and absence of the types of deposits at a particular place. But as the results of his study cannot always be correct actual drilling is undertaken to verify through the findings. Through these operations, the contents of the mineral deposits and the extent and depth in which they lie may be found out. If the results of the drilling operations are successful only then regular mining operations are taken up. Besides drilling for minerals, drilling is also used for various other purposes such as foundation testing for dams and huge engineering structures, taking samples of soil, oil-well drilling, tube-well drilling, etc.

There are different methods of drilling, Percussion, Calyx, Auger, Rotary, etc. In Percussion drilling, a heavy bit (tool) shaped like a chisel is raised and dropped by a cable, thus breaking up the rock and crushing it. In calyx drilling the bit which turns round against the rock for drilling

holds steel shots as abrasive. The Shots when rotated break and grind the rock. Auger drilling is used for soil sampling at shallow depths. The Auger is likely the tool that a carpenter uses to make a hole in wood. In this kind of drilling when the bit is pressed down and turned round, the soil is cut and removed.

For deep drilling of earth and various types of rocks and also for deep oil drilling, Rotary drilling is most commonly used. Rotary drilling as the name suggests is a method in which the bit is rotated and at the same time steadily pressed against the rock. It may be briefly described as follows:—

A tubular hollow steel bit set with industrial diamonds or with other hard material tips, like tungsten carbide, is joined to a hollow pipe called a barrel. The barrel is connected to other hollow rods and the whole length is turned round and pressed down power. As the rods, barrel and bit are turned round and pressed against the rock, the rock is broken up in powder and the bit advances. Water is pumped under pressure by a water pump and thus water is pressed through the rods and the barrel for cooling the bit and washing out the rock cuttings from the hole. A sample of the rock is simultaneously collected in the barrel and held in it by a spring. The barrel is withdrawn after every 10 feet or so and the sample is collected for analysis.

The man who operates a drilling machine is known as a Driller or Drill Operator. He has to get the machine fixed, mounted, and installed at the place of work. The place of work is sometimes on mountains or high levels. Getting machines in position is sometimes very difficult. He does it with the help of Khalasis and other unskilled labour. Generally he has a team of five or six such workers to help him. The driller is also responsible for a good supply of water for drilling purpose. Before commencing the work he ensures that water pipes and pumps are installed and all arrangements for storing water are complete. Responsibility for the operation of the engine also lies with him. However, his main task is to drill as many pipes into the earth as possible and collect the samples of underground levels. In one day an operator may be able to put down 30 to 40 pipes i.e.,

pierce 300 to 400 feet into the earth. The drilling speed and the pressure of the drilling machine, however, have to be controlled according to the type of rock or soil underground and the capacity of the machine. Hard rocks underneath may slow down the speed of the boring. The driller also makes regular tests to see that the bore hole is not making a wide departure from the vertical. In addition to all these he has to maintain a record of operations.

PERSONAL QUALITIES necessary for the job are good health and capacity for hard manual work. As operations are carried on at places which continually change, adaptability to and liking for camp-life is essential.

A driller has to live an out-door life throughout his service. Very often he is isolated in mountains and jungles without some of the urban amenities of life. He has to get accustomed to all sorts of weather conditions also. He must be quick in operating machines. He has to keep a high degree of focussed attention on his work and he should be careful. He should have the ability to maintain good relationship in a team. A driller must be prepared for mud, oil and grease and work with his own hands on machinery and equipment.

TO QUALIFY a driller has to get on-the-job training, usually as a Khalasi or a Rigman in a drilling unit. Those who enter as Khalasi or Rigman with the hope of becoming a driller should have some education, technical background and mechanical aptitude. The Khalasi learns the job while helping his senior colleagues in a drilling team. He helps in the movement and installation of machinery, screws and unscrews the drillpipes during the operation, operates the motor, supplies the cooling fluid down the drillpipes, looks to the water supply and occasionally operates the machine, itself. Seven to ten years' experience as a Khalasi or Rigman is considered necessary for acquiring adequate knowledge of drilling machines and therefore for promotion to the post of Driller.

Oil drilling is complicated. Drilling ranges from 6000 feet to 15000 feet. Heavy equipment is used and highly skilled drilling efficiency and experience is required. Finishing and testing jobs are also very complicated in oil-well drilling, compared to other shallow drilling.

The Geological Survey of India and the Indian Bureau of Mines have schemes for training youngmen as drill operators on each drill that they are operating in the field. A regular training school for drill operators and drilling technicians at Jawalamukhi in Punjab has already been started. Another school is proposed to be started at the Cambay Drill site.

OPENINGS are available in the Indian Bureau of Mines, the Geological Survey of India and the Atomic Energy Department of the Central Government. Employment opportunities for drillers exist also with the Assam Oil Company, INDO-STANVAC, Kolar Gold Field, Indian Copper Corporation and a few Dam and Barrage Construction Companies.

PROSPECTS OF ADVANCEMENT. The posts of the Drilling Assistants, Technical Assistants and Senior Technical Assistants exist for experienced Drillers, as few technicians trained in institutions are available for direct appointment to these posts. In fact, drilling is one of the few occupations in which a person entering at the lowest level of Khalasi or Rigman may expect promotion to the post of a Senior Technical Assistant provided he has sufficient mastery of the work.

EMPLOYMENT OUTLOOK: India's need for mineral exploitation cannot be over-emphasized. The rapid industrialisation of the country demands an increasing supply of minerals like petroleum and iron ores. The import of essential minerals from other countries would mean spending away our limited foreign exchange and is to be reduced as quickly as possible.

The Second Plan provides for continuation of the work begun during the First Plan period to find out how much of the important minerals can be found in the country. Detailed geological investigations followed by drilling are being carried on at various places for finding coal, manganese ore, copper, chromite, gypsum, lead, zinc, tin, oil, etc.

This programme, of course, involves strengthening of the drilling staff of the government establishments concerned. The private sector also will require some drilling technicians. In the coming few years, there will be a number of new jobs of drilling technicians in which healthy young men with some educational and technical back-

ground and aptitude for mechanical work can be absorbed.

FURTHER INFORMATION may be available from:

1. The Indian Bureau of Mines, New Delhi/Nagpur.
2. The Geological Survey of India, Calcutta.
3. The Oil and Natural Gas Commission, New Delhi.

Vocabulary Test

(Continued from page 433)

31. Intransigent—A: refusing to agree or compromise. B: unable to be crossed. C: aggressive, hostile.

32. Obtuse—A: incomprehensible. B: dull, stupid, slow of perception. C: hazy, indistinct.

33. Specious—A: wily, cunning, artful. B: plausible, good on the surface only, showy. C: large in extent, roomy.

34. Nullify—A: to make of no effect, cancel, void. B: to slander, cast aspersions. C: to turn into gaseous form.

35. Immutable—A: unchangeable, unalterable, changeless. B: silent, stealthy. C: unconquerable, invincible.

36. Prurient—A: given to indulgence of lewd ideas. B: over ripe, approaching rotteness. C: covered with dust.

37. Plethora—A: a term used in astronomy. B: unhealthy excess or super-abundance. C: a centre of attraction.

38. Instigate—A: to initiate, set afoot. B: to contaminate or pollute. C: weaken by suggestion.

39. Efface—A: imprint, impress, stamp. B: to disfigure, mar, spoil. C: wipe out completely, do away with.

40. Stultify—A: to adulterate. B: make, or cause to appear, foolish or ridiculous. C: to confirm, ratify.

ANSWERS

- (1) B. (2) B. (3) C. (4) C. (5) B. (6) B.
 (7) B. (8) B. (9) C. (10) A. (11) B. (12) C.
 (13) B. (14) A. (15) A. (16) C. (17) A.
 (18) B. (19) C. (20) B. (21) C. (22) A.
 (23) B. (24) C. (25) A. (26) B. (27) C.
 (28) B. (29) B. (30) B. (31) A. (32) B.
 (33) B. (34) A. (35) A. (36) A. (37) B.
 (38) A. (39) C. (40) B.

EDUCATIONAL FORUM

DEVELOPMENT SCHEMES OF DELHI UNIVERSITY

A consolidated provision of Rs. 7,50,000/- for the construction of a stadium, a pavilion, an oval track, a swimming pool and a Yoga centre has been included by the Delhi University in its development schemes for the Third Five Year Plan, stated Dr. K. L. Shrimali, Union Minister of Education, in the Lok Sabha on March 28, 1961.

The Minister added that these development schemes were yet to be considered by the University Grants Commission.

The Minister further said that approximately Rs. 2,00,000 would be the estimated expenditure on the construction of a building for the Students' Union of the Delhi University.

Dr. Shrimali added that the staff and students of the University had collected Rs. 42,741/- for this purpose. The University had also approached the University Grants Commission for a Rs. 1,00,000/- grant but the Commission had not acceded to the request due to paucity of funds. The University proposed to approach the Commission again during the next financial year.

Dr. K. L. Shrimali also informed the House that the Delhi University authorities proposed to organise the Delhi School of Social Work as a University-maintained institution, as desired by the management of the School. This was being done to maintain its independent status and individuality.

TECHNICAL INSTITUTIONS FOR GIRLS

Shri Humayun Kabir, Union Minister of Scientific Research and Cultural Affairs, stated in the Lok Sabha on March 15 that the Third Five Year Plan of the States provided for the establishment of 27 technical institutions for girls.

The Minister added that a detailed scheme for such institutions had been formulated by the Central Government and circulated to the State Governments.

RHODES SCHOLARSHIPS FOR INDIA

The Rhodes Trustees have announced their decision to establish a second Rhodes Scholarship for India each year. One scholarship has been awarded to India each year since 1949.

This will make an annual total of 36 scholarships available to students in the United Kingdom and other Commonwealth countries, in addition to 32 awarded to the United States.

Rhodes Scholarships, tenable at Oxford University, are available to young men between the ages of 19 and 25. Each Rhodes Scholar is elected for two years, at a stipend of £600 a year. Since the establishment of the scholarships in 1903, more than 3,000 have been awarded.

Rhodes House, Oxford, was completed in 1929 as a permanent memorial to Mr. Cecil Rhodes, founder of the trust. He died in 1902. He had attended Oriel College, Oxford, in the 1870's.

Rhodes Scholarships were originally created for students from the United Kingdom, the British Empire, the United States, and Germany. It was Rhodes' ideal that good understanding between countries would secure the peace of the world—"and educational relations form the strongest tie", he said.

LECTURES ON GANDHIJI IN COLLEGES

Dr. K. L. Shrimali, Union Minister of Education, said in the Rajya Sabha on March 6, 1961, that the scheme of arranging lectures on Gandhiji's life by eminent scholars in colleges and universities was nearing finalisation.

The Minister added that in addition to this scheme, it was proposed to present a set of carefully selected Gandhian literature to each college and university during 1961-62.

The Minister further said that Kumari Manuben Gandhi had delivered lectures on Gandhiji at the request of the Government in selected schools in the States of Madhya Pradesh, Uttar Pradesh, Bihar, Rajasthan, Delhi and erstwhile Bombay.

MID-DAY FEEDING OF CHILDREN

Nine States besides Madras had adopted the scheme for mid-day feeding of children in schools stated Dr. K. L. Shrimali, Union Minister for Education, in the Lok Sabha on March 28, 1961.

The States were: Andhra Pradesh, Assam, Gujarat, Kerala, Mysore, Orissa, Punjab, Uttar Pradesh and West Bengal.

The Minister added that according to the revised procedure for sanctioning central assistance, introduced since 1958-59, lump sum ways and means advances were sanctioned to the State Governments group-wise and not scheme-wise. It was, therefore, not possible to indicate how much central assistance had been sanctioned to the Government of Madras for this particular scheme. Dr. Shrimali said that central assistance at 50 per cent of the expenditure involved was given to those State Governments which included the scheme of mid-day meals in their Educational Development Programmes under the Second Five Year Plan, within the ceiling fixed by the Planning Commission.

SCHOLARSHIPS FOR SANSKRIT STUDIES

The Union Ministry of Education has selected, on the recommendation of the Central Sanskrit Board, 17 candidates for the award of Research Scholarships for scholars trained in the traditional Sanskrit pathshalas.

The Government of India instituted this scholarship scheme to enable scholars of the traditional system of Sanskrit education to carry out research in Sanskrit.

The value of each scholarship is Rs. 100 per mensem. The scholarship is tenable for two years or up to the time of completion of the research work, whichever is earlier.

The subjects for research include preparing critical editions of difficult Sanskrit texts; bringing out expositions of recondite texts, technique and terminology; studying a writer or a line of thought and/or its development and such other subjects as are commonly taken up in the field of Sanskrit Research at Universities.

RECRUITMENT FOR BETTER TEACHERS

Dr. K. L. Shrimali, Union Minister for Education, outlined in the Lok Sabha on

March 28, the steps taken by Government to attract persons with better educational record to the teaching profession.

The Minister said that steps taken included improvement in salary scales at all stages; assistance to State Governments on a 50:50 basis during the Second Plan for improving the emoluments of primary and secondary school teachers and a provision in the Third Plan for scholarships for meritorious children of primary and secondary teachers for pursuing studies after the matriculation level.

Other measures adopted were an improvement in the social status by giving National Awards for teachers and inviting them to State functions and providing greater opportunities to improve academic and professional knowledge. Provision had also been made for more satisfying conditions of work.

* * *

3-YEAR DEGREE COURSE IN PUNJAB

The Panjab University has directed all its affiliated colleges to switch over to a three-year degree course from the next academic year, it is learnt. The intermediate classes will thus be abolished.

The colleges have been asked to run one-year preparatory classes for students passing their matriculation examination under the old system.

The Punjab Government has earmarked a sum of Rs. 17,94,000 for assistance to colleges for switching over to the new system.

The University Grants Commission has also sanctioned Rs. 10,49,000 for Government colleges in the State. It has agreed to give a similar grant to the private colleges.

* * *

MILITARY SCHOOL IN RAJASTHAN

A military school will be started in Rajasthan in July this year, it is learnt.

It is expected that initially the school will admit 250 students, subject to the availability of residential accommodation.

The school will be located at Chittorgarh Fort. An all-India test will be held for admission to the school. An all-India governing council, with the Union Defence Minister as chairman, will be formed.

A local board will look after the day-to-day administration of the school.

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.--Ed. C & C.)

RITCHIE CALDER TO RECEIVE KALINGA PRIZE FOR 1960

A lifetime spent roaming the world and exploring its scientific frontiers to make them less remote for the general public was honoured in Paris on March 8 when Unesco announced the selection of Ritchie Calder, leading British science writer, as winner of the annual international Kalinga Prize for the popularization of science.

Widely known as a radio and television broadcaster as well as an author, Mr. Calder is the ninth winner of the Kalinga Prize of 1,000 pounds sterling, offered by the Kalinga Foundation created to contribute to economic, social and cultural progress in the Indian State of Orissa.

The purpose of this award, as stated by its donor, Mr. B. Patnaik, an Indian industrialist, is to offer recognition to leading interpreters of science and also to strengthen links between India and scientists of all nations.

The prize is awarded every year by an international jury appointed by Unesco. Its eight previous winners have been Louis de Broglie (France), Julian Huxley (United Kingdom), Waldemar Kaempffert (United States), Augusto Pi-Suner (Venezuela), George Gamow (United States), Bertrand Russell (United Kingdom), Karl von Frisch (Germany and Austria) and Jean Rostand (France).

The members of the jury selecting Mr. Calder were Prof. Giuseppe Montalenti of Italy, president of the International Union of Biological Sciences; Mr. Gerard Piel, of the United States, publisher of the "Scientific American"; and Prof. I. I. Artobolevski of the Academy of Science of the Soviet Union.

Mr. Calder was the candidate of the German Science Writers' Association, and of the American, British and South African Associations for the Advancement of Science. He will receive the award at an official ceremony in Unesco House.

Mr. Calder, who is fifty-four, was science editor of the *News Chronicle* in London from 1945 to 1956, and of the *New Statesman and Nation* from 1945 to 1958. His fifteen books on scientific subjects ranging from medicine to the struggle for life in the Arctic have been translated into a dozen languages, including Urdu, Bengali and Swahili. Among them are "Men Against the Desert", "Men Against the Jungle", "Science Makes Sense" and "Profile of Science".

He also has been extremely active in organizations created to further the cause of science and science popularization. He is a member of the council of the British Association for the Advancement of Science. He is also a founder-member of the Association of British Science Writers and served as its chairman from 1949 to 1955. He was recently appointed Professor of International Relations at Edinburgh University.

Kalinga is the name of a foundation which contributes to the economic development and the social and cultural progress of the Indian state of Orissa. The Kalinga Prize of 1,000 pounds sterling is offered for the purpose of recognition of the work of leading interpreters of science and of strengthening links between India and scientists of all nations.

The prize fund is a personal donation of Mr. B. Patnaik, a member of the Legislative Assembly of Orissa. He is a director of the foundation, which is headed by Mr. H. Mahatab, former Chief Minister of Orissa State.

The foundation derives its name from the Kalinga empire, which stretched over a great part of India and Indonesia. The empire was conquered by the great sovereign, Asoka, more than 2,000 years ago, but the campaign gave him such a distaste for war that he spent the rest of his life in working for peace.

Nominations for the recipient of the Kalinga Prize are received each year from

various scientific groups directly interested in the popularization of science and particularly from national associations for the advancement of science and national associations of science writers.

* * *

INDIA MAKES SUPERSONIC AIRCRAFT

India will soon join the only five countries in the world in the manufacture of supersonic aircraft. A spokesman of the Hindustan Aircraft Factory told newsmen the Hindustan Fighter—24 (HF-24) the first truly supersonic aircraft was now ready and had started its preliminary trials. The progress has been most satisfactory and the aircraft held promise for the future.

India is the first Asian country and one among the few European countries to make the kind of supersonic fighter aircraft now being designed and developed at the Hindustan Aircraft Factory in Bangalore. The only other countries to develop similar aircraft are the United States, the Soviet Union, the United Kingdom, France and Sweden.

According to a spokesman, HF-24 incorporates the latest thoughts and practices to enhance its performance according to the most modern standards. It has also the most up-to-date devices to ensure maximum safety for a pilot. If something goes wrong with the aircraft when it has attained extreme altitude as series of automatic operations will enable the pilot to land safely even though he may have become unconscious soon after ejection at a height of 40,000 to 50,000 feet.

HF-24 is a twin-engined aircraft powered with Bristol Orpheus engines. The manufacture of the engine itself will be undertaken at HAL which has already taken up the manufacture of Rolls Royce Dart air engine which will power the first Indian built transport aircraft now being developed at the Air Force Base at Kanpur.

* * *

CULTURAL AGREEMENT BETWEEN INDIA AND MONGOLIA

A Cultural Agreement between the Republic of India and the People's Republic of Mongolia was formally signed in New Delhi on March 9, 1961. The Agreement aims at further strengthening the existing ties of friendship and promoting better understanding and closer coopera-

tion between the two countries in the fields of science, education and culture.

The Cultural Agreement which consists of 5 articles will remain in force for a period of five years and shall continue in force thereafter until it is terminated by either party by giving notice of not less than six months in writing.

Under the Agreement, the two Governments desire to promote in every possible manner the development of close cooperation between the cultural, scientific, arts, educational, health, sports and other similar institutions of the two countries.

The present Agreement is the 12th Cultural Agreement signed by India since 1951. The earlier Agreements were signed with Turkey, Iraq, Indonesia, Japan, Iran, Poland, Rumania, U.A.R., U.S.S.R., Yugoslavia and Czechoslovakia.

* * *

WORLD METEOROLOGICAL DAY

To the man in the street weather forecasts exist to tell them whether it will be rainy or fine next week-end, and whether or not they should take a raincoat with them when they go out in the morning. To others—aircraft pilots, farmers and seamen—weather forecasts are an important and sometimes vital factor in their work.

Issuing of weather bulletins and warnings, however, is not the only contribution which meteorology makes to the welfare of modern man: it also serves many branches of economic development, ranging from artificial rainmaking to guidance given to public works authorities and civil engineering undertakings in carrying out hydro-electric projects, town planning etc.

To make these services better known to the general public, the World Meteorological Organization, which is one of the Specialized Agencies of the United Nations, has decided that March 23 each year should be celebrated as World Meteorological Day. The event took place for the first time on March 23, 1961, and the WMO distributed through its Member States information on the practical applications of meteorology in such little known fields as public health, the peaceful uses of atomic energy, transportation, satellite and rocket research, etc.

WMO plays a vital part in coordinating and organizing the exchange on a worldwide basis of information on weather fore-

casting for the benefit of aviation, shipping and agriculture. It helps to standardize instruments and methods of observation and issues internationally agreed guides and technical regulations.

WMO also carries out many projects calling for action on an international scale, such as development of water resources, participation in tropical and arid zone research, locust control, and scientific studies designed to lead to a better understanding of the atmosphere.

* * *

FATHER DE RHODES AND QUOC-NGU

Viet Nam has just celebrated the 300th anniversary of the death of Father Alexandre de Rhodes, a French Jesuit who was one of the creators of Quoc-Ngu, the modern Viet Nameese alphabet.

Alexandre de Rhodes was born in Avignon on March 14, 1591, the son of a Provencal family of Judeo-Spanish origin. He arrived in Indo-China in 1624 and spent seven or eight years methodically analysing the Viet Nameese language. He published the results of his studies in a book which was to become a philological landmark.

At the same time, he worked out a new alphabet based on the Roman alphabet as a substitute for the old Chinese script in Viet Nam. He wrote a number of books, including the first treatise on Viet Nameese grammar and a Viet Nameese-Portuguese-Latin dictionary. He also left several accounts of his trips and missions as well as a secular and religious history of Tonkin, now considered as valuable historical documents. He died at Isfahan, the former capital of Persia, on November 5, 1660.

To mark this 300th anniversary, the Viet Nameese authorities organized a series of lectures in Saigon and an exhibition covering the life and works of Father de Rhodes, Viet Nameese society in the 17th Century, and the evolution of the Viet Nameese written language (Quoc-Ngu) from its origins to the present day.

* * *

LANDS WITHOUT RAIN

Lusaka, capital of Northern Rhodesia, had its last shower a year ago, when one-hundredth of an inch fell—hardly enough to be measured.

In one place in Queensland, Australia, rain has not fallen for four years and the roads are choked with dust. When an

opera company went on tour there recently, its members were supplied with surgeons' masks to keep the dust from their throats.

In the drought of 1934 the area was so short of water that people with well-filled tanks sold it at 25 sh. a gallon. Farmers mounted armed guard over their supplies to protect them from thieves.

The dusty, volcanic island of Curacao, in the Dutch West Indies, is perpetually short of water. British tankers often deliver water there.

When rain fell in Sabinas, Mexico, in 1957 the townsfolk enjoyed the first down-pour for 12 years.

About the same time a 24-year-old girl arrived in Liverpool from Lima, Peru. The most amazing thing she saw en route was the rain that fell as the ship approached England. It was the first rain she had ever seen.

Rainfall in 1925 in the ancient town of Chan Chan, near Trujillo, in Peru, broke a drought that had lasted 525 years. There was a deluge lasting a whole week, followed by a drought that lasted a further 30 years.

"The prime fact of human nature which the wise statesman must take into account is that men will exert themselves for their own benefit, or for that of their families, regarded as an extension of themselves, as they will exert themselves for no one else; and, in particular, men are not prepared to work for the state or for any other collectivity as they will work for themselves or for their families. Perhaps this is a defect in human nature, but it is a fact, and the statesman ignores it at his peril."

—by Ivor Thomas

* * *

We are best tried when we are thwarted in what to us are holy purposes. God's ways are strange and inscrutable. Not our will but His must be our law—**M.K. Gandhi**

No life is wasted unless it ends in sloth, dishonesty and cowardice.

—Thomas Huxley

* * *

To achieve success not by heritage but by individual effort is the greatest joy in life.—**John P. Morgan**

Readers' VIEWS

FUTURE OF INDIA

Sir,

It is highly distressing to note that the leaders of Punjabi Suba are still fighting fast to get separate state for themselves. If this is encouraged and if the Government of India bows down to the needless demand, the people of Vidarbha will take the undue advantage to blackmail the Government and threaten to take fasts unto death and so on. Next the Tamilians may say that they will form a separate Nation for themselves with separate Constitution and President like Katanga in the Congo. In this way the whole of India will be cut into pieces creating deep diversities.

Creation of the States on linguistic basis is the origin of these anti-social and anti-national occurrences. Separation of Bombay into Maharashtra and Gujarat has assured firmly the other agitators of their respective demands.

Due to the disparity in the language the affinity and contact between the people of different states would ostensibly deteriorate. A person from one state may find himself as a foreigner in another state of which the ultimate result would be that a person of one state may not be found in the precincts of the other. And it is natural, therefore, that a person would never try to learn the language of the state which is not his own thus creating a veritable schism between the two.

If this is practised in the days to come, the undivided Indian Union will be a sub-continent consisting of separate states with independent governments.

The future of India will be ruined by the separate states. In future one state may send the Ambassador to the other to exhibit Independence. Also it may happen that one state tries to occupy the territory of the other state by force. They may obtain assistance from the countries outside, leading the fate of India to the bad old days.

The people who think that it is their duty to protect the sovereignty and integrity of the country and improve the conditions of the mass at large socially, econo-

mically and morally, must step forward to put an end to these anti-national and anti-social activities. It is the duty of every citizen to strive for the Unity of India and to see that he contributes something good to the progress and prosperity of his Nation.

(Joshi Krishna Murthy, Jamshedpur)

* * *

IMMORAL TRAFFIC

Sir,

Often, it is complained from many quarters that the prostitution in spite of the Indian Immoral Traffic Suppression Act, is going on rather progressively in the country. The complaint is quite justified. It proves that social evils and problems cannot be solved by legislation alone.

Prostitution—a promiscuous sexual intercourse for hire whether in money or in kind—is an ancient profession, as old as the world, and it is difficult, nay impossible, to stop it. Many high-placed officials responsible for the enforcement of the law feel that all attempts at closing it altogether are foredoomed to failure. It is further asserted that not only prostitution is inevitable as an institution but also it is desirable for it serves as a safety valve, absorbing as it does the violent passions of the dissolute, and thus saves the society from ugly and unabashed overtures.

With that on one side, we find the greatest stigma heaped on the prostitute. She is blamed for wrecking personality and communicating disease. She is blamed for debasing sex not for love but for a price. She is blamed for deflecting the instinct of love from its true purpose to the base purpose of earning a living. She is the conscious instrument facilitating extra-marital excursions which help in breaking up marriage and the family—two ties still regarded as sacred and fundamental to social organization and welfare. Above all, she is termed a sex offender and a social menace.

But it should not be forgotten that a prostitute is the product of ill-treatment and neglect and no girl or woman is inter-

ested in becoming, or tries to become one. It is the male patron that maintains a demand for her and is prepared to pay a price for this, and had this not been the case, the profession of prostitution could not have thriven. A prostitute is only an agent—often an unwilling one. Thus, the system that punishes the agent and absolves the principal can and should be only indefensible.

Moreover, once a woman's honour is violated, the society does not agree to take her back probably on the plea that a "fly cannot be swallowed knowingly." Under such circumstances, the neglected and ill-treated women have no other alternative for their existence.

Thus it becomes clear that the blame for prostitution does not lie so much with the women engaged in it as with the society itself. Keeping in view the overall welfare of the society, it would be much beneficial and fruitful if prostitution is put an end to. But this can be possible only if the society sincerely extends a helping hand with a view to making the legislation in this respect really effective.

(Rajendra Prasad Goswami, New Delhi)

* * * FUNCTIONAL SOCIETY

Sir,

'The society which the wealthy people can claim or enjoy is a society of parasites and parasites can never make happy the victims on whom they feed.'

A straw in the winds tells which way the wind blows. There are so many straws in the social wind of today. They tell, it is wealth that is honoured not service or function. It appears as if man exists for production, more production and still more production. These days industry is not servant but master of man. The controllers and directors of industries are not the specialists who know about the industries, but the financiers who know nothing about the industries. And above all there is no moral principle to which the economic activity may be referred.

Modern society is based upon unfair principles. It is not based upon religion like that of pre-industrial era but upon the economic considerations and economic principles. And these economic principles are far from being just.

Property, these days, has grown 'im-

property'. The society has grown acquisitive. Ownership is divorced from work. Upon the industry of others, idle class lives as a pensioner. Rewards are not distributed according to service.

To get changed the afore-mentioned false society into a just and true society, the remedy is. . . .

The society should be based upon function. Every body should be paid according to the work he does, i.e. the acquisitive society should be converted into a functional one. Industry should be liberated from the clutches of the idle owner. Nationalisation is a way but there are other ways also. The rights of the owner may be reduced and he may be treated as a financier paid a fixed rate of interest for his capital. He may be replaced by workers' organisations. But mere liberation of industry won't do. It should be turned into a profession. That is, industry must be based upon principle of function. Workers should also have a say in the control and administration of industry. Responsibility attached to authority. But the authority given to them should be as much as is necessary for the efficient discharge of their respective functions. And the industry should be so organised as to get the greatest willing co-operation from the worker. New conditions of efficiency should be created. And the workers should be given special training for their trades.

Industry should be assigned to its proper place. Industry is a means and not an end. And if it serves that purpose, industrial activity is good, otherwise not. The scales of values should be rearranged by the society. Those who create should be honoured and those who do not should not be. Every body should be paid proportionately. Because the reason for the struggle between the employer and the employees in fact is not more profits and less wages, or less profits and more wages; but for the proportion between the wages and profits. The struggle between the two shall remain so long as the profits are not shared in proportion between the two according to the work done.

'The defects of capitalism can be removed either by ending it or by mending it. It can be mended by fixing a maximum limit on profits and a minimum limit in wages.'

(Saleh Mohammed, Rajasthan)

DISARMAMENT

Sir,

The ticklish problem of disarmament is being widely discussed far and near, in the United Nations General Assembly, amongst the members of the SEATO and NATO, and among various other organisations. We are fully aware of the full-blooded speeches made in the General Assembly headed by the delegates of the U.S.A. on one side and Russia on the other, but with absolutely no results. And this is because of the fact that no one country can guarantee the other about non-production of arms. The fact remains that nothing is either feasible or possible until all the country taken together take the vow of complete non-production of arms, which in itself is neither meaningful nor truthful, neither thinkable nor recommendable. One may just be sure that thinking along these lines is just like living in a fool's paradise and deceiving one's self.

It is high time that one should give up such a nuisance talk—talk of the feasibility of 'complete disarmament'. Instead, it is better, atleast in the present set up, to encourage all the countries to devote a part, but not all of their energies in the production of nuclear weapons and disastrous arms. In truth, the real peace would emanate only if you are prepared for war, because all the rival countries would then be aware of the consequences of such a war-cry leading to a major catastrophe. To prove this statement one may further add that the reason why cold war has not yet taken the shape of hot war is that both the powerful countries, the U.S.A. and the U.S.S.R. are qucerly afraid of each other's might and predominance in nuclear weapons and arms. In other words, one may apologetically conclude, 'if you want peace, be prepared for war.'

(K. B. L. Mathur, Jalore)

* * *

THE TASK OF THE MODERN STUDENT

Sir,

Plato says: "For since all nature is akin, and the soul has learnt everything, there is nothing to hinder a man, remembering one thing only—which men call learning—from himself finding out all else, if he is brave and does not weary in seeking, for seeking and learning is all remembrance."

Education has come a long way, both

in concept and application, since the first philosopher sought to give its definition.

Who would say today that man can learn all things by remembering or by reason alone? And who would have said two thousand years ago that man could learn by sleeping and listening to the voice of a machine with his subconscious mind?

While it may be true that a man can "educate" himself to some degree in philosophy by the power of thought and reason, it is not true that a man can educate himself in any science by the same method.

Ever since philosophy gave birth to science, there has been only one way of learning science, and that is by experience, the experience of others handed to us by word of mouth or by book, or the experience of our own laborious testing in the field of our choice.

A student studying philosophy today must qualify himself not only by finding out what the basic questions were put and how they have been handled from time to time by others, but he must also know of the new questions which the others have proposed in the course of answering the old ones.

The same thing is true of science because, like philosophy, the answer supplied to one question usually opens the door to a dozen other questions and hundreds of possibilities. So much so that from the elementary questions on physics have evolved not only other questions but other sciences also. The modern student therefore can never hope to be a scientist in the sense that he masters all sciences. The best he can hope for is to be an efficient cell in man's total knowledge of one science or, second best, an inefficient jack of all sciences.

This is the first question that the student must decide when he ventures seriously into the ever-expanding sea of knowledge. More precisely, what course to follow.

There are many courses open for the student who measures success by material affluence, but harder ones perhaps for the student who measures success by degree of fame.

But for the thoughtful student these courses, and other as well, offer a greater challenge in a multiplying problems daily. That challenge is simply to be able to offer

the best of his talent in solving some of the problems and making a valuable contribution to a needy civilization.

If there is one redeeming factor in modern society it is the growing awareness of the importance of the so-called lowest common denominator. This is true in both of the major ideologies which divide today's world. (Shyam Sunder Lal, Banaras)

TOWARDS ENTERING A PROFESSION

Sir,

One of the foremost aims of education is to prepare youngmen for one profession or the other. Parents desire that their children should grow up, study and become breadwinners and to lend a helping hand to their families. It has been seen that some of the parents are too ambitious about seeing their wards in the higher posts irrespective of the intelligence their children possess. Parents should seek the advice of some psychologists in knowing the intelligence of their wards. All the children cannot be Engineers or Doctors or Scientists and the like. For getting entry into these professions, very high intelligent quotient (I.Q.) is required. Intelligence is unborn and cannot be increased by any known mechanical device.

Another tragedy of modern education is that all cannot receive education according to their aptitudes and interests. Some poor but intelligent students fail to reach their aspired goals because their parents cannot afford to send their wards to the higher professional colleges. We can quote the examples of celebrated scientists like Faraday, Edison and the like, who had to struggle hard to have square meals in their early days. In India children of such calibre are not lacking. Some youngmen, owing to one reason or the other, cannot proceed beyond matriculation. Government should lose no time to set up a machinery in order to find out the talented youths and educate them on the state expenses.

In every school there should be a vocational guidance bureau to guide the students about the careers open to them in consonance with their intelligence, personality traits and the like. By doing so, no doubt government will have to spend some money, but its after affects will outnumber the money spent. Educated young men

will be saved from the botheration of groping in the dark about their future.

(S. S. Jaswal, Ambala)

FREE WORLD

Sir,

It is with reference to the March 1961 issue of your esteemed journal "Careers and Courses" which carries an article about Laos on Page 227. In the third para of the article a mention has been made of North Vietnam as Communist and South Vietnam as pro-Western. As a matter of course the appropriate opposite word for Communist is Democratic and not pro-Western, and South Vietnam should be characterised as such. But if South Vietnam is to be termed as pro-western then North Vietnam should logically be called as pro-China or Communist Satellite.

It is a matter of true definition and we are sure that you will kindly carry the necessary correction in your esteemed next issue. Further we would like to point out that Vietnam is for freedom in the sense we understand it in the world and as such is pro-free world.

(Do Trong Chu, Consul,
Republic of Vietnam, New Delhi)

STANDARD MAGAZINE

Sir,

'Careers and Courses' is keeping pace with the changing of times and is raising its standard day by day. It is this magazine that gives full value for the price one pays.

The Editorial Staff in particular and the management in general deserve all praise. (Roshanlal Vaid, Delhi)

For years to come India would be engaged in passing legislation in order to raise the down-trodden, the fallen, from the mire into which they have been sunk by the capitalists, by the landlords, by the so-called higher classes, and then subsequently and scientifically by British rulers. If we are to life these people from the mire, then it would be the bounden duty of the National Government of India, in order to set its own house in order, continually to give preference to these people and even to free them from the burdens under which they are being crushed.—Mahatma Gandhi

FILM WORLD

STATE AWARDS FOR FILMS

Eighteen feature films, three children's movies, three documentaries and three educational "shorts" had been recommended for State Awards for films for 1960.

The President's Gold Medal was awarded to a feature film in Hindi, "Anuradha." The film's producer got a cash prize of Rs. 20,000 and the director Rs. 5,000.

A Bengali film, "Kshudita Pashan," was adjudged the second best feature film and it was awarded the All India Certificate of Merit, together with a cash prize of Rs. 10,000 to its producer and Rs. 2,500 to its director.

For the third prize, a Tamil picture, "Daiva Piravi," was selected. The film was awarded the All India Certificate of Merit.

The Central Committee for State Awards previewed 21 feature films, five children's films, five educational films and six documentaries—all recommended by the Regional Committees—which accounted for a screening time of about sixty hours. The committee, presided over by Professor N. K. Sidhanta, Vice-Chancellor of the University of Delhi, was in session from March 1 to 13.

For the President's Silver Medal, the highest prize in the regional awards, seven films were selected. They are "Mughal-e-Azam," in Hindi; "Devi," in Bengali; "Parthiban Kanavu," in Tamil; "Mahakavi Kalidasu," in Telugu; "Kanyadan," in Marathi; "Sree Lokanath," in Oriya and "Mehndi Rang Lagyo" in Gujarati. Nine other films got the Certificates of Merit in the regional awards.

Certificates of Merit have been awarded to "Jis Desh Men Ganga Bahati Hai," and "Kanoon," in Hindi, "Umaj Padel Tar," in Marathi, "Ganga" in Bengali, "Pathai Theriyuthu Par" and "Kalathur Kannamma," in Tamil, "Seetharama Kalyanam," in Telugu and "Bhakta Kanakadasa," in Kannada.

Among the children's films, the Prime Minister's Gold Medal was awarded to "Phool Aur Kaliyan." The film's producer

got a cash prize of Rs. 20,000 and its director Rs. 5,000.

"Id Mubarak" was adjudged the second best film in this category and it was awarded the All India Certificate of Merit, with a cash prize of Rs. 10,000 to its producer and Rs. 2,500 to its director. For the third prize "Delhi ki Kahani" was selected. The film was awarded the All India Certificate of Merit.

The documentary, "Kangra and Kulu," was awarded the President's Gold Medal, with a cash prize of Rs. 4,000 to its producer and Rs. 1,000 to its director. "Saga of Service" got the second prize in this category—the All India Certificate of Merit and a cash prize of Rs. 2,000 to its producer and Rs. 500 to its director. "The Weavers" got the All India Certificate of Merit.

The educational films selected are "Pond Culture" for the President's Gold Medal and a cash prize of Rs. 4,000 to its producer and Rs. 1,000 to its director. "Cotton" for All-India Certificate of Merit; and "Wheat" for All-India Certificate of Merit.

The Awards were distributed on March 31, 1960.

INTERNATIONAL FILM FESTIVAL IN MOSCOW

A second international film festival is to be organized in Moscow from July 9 to 23 this year with for its theme: "For humanism in cinematographic art, for peace and friendship between peoples."

Prizes will be awarded for various categories of films including popular science, cartoons, documentaries, children's films, and also for the best script, photography, acting, music, etc.

All countries are invited to present one feature film and one documentary at the Festival. Productions must have been completed during the 18 months preceding the opening of the festival and must not have been entered for any other international competition. Entries should be received at the Office of the International Film Festival, 13 Vassilievskaya, Moscow, before 15 May 1961.

Consent to serve as members of the jury of the Second International Film Festival in Moscow has been announced by Leon Moussinac (France), Ronald Nceme (Britain), Liviu Ciulei (Rumania), Luchino Visconti (Italy), Karel Zeman (Czechoslovakia), Francisco Pinonj (Mexico), Zoltan Varkosp (Hungary), Aoris Ivens (the Netherlands), and others who were invited to take part in the Festival.

JOINT FILM VENTURE BY 13 COUNTRIES

Film Directors of the 13 countries have started shooting a big documentary anti-war film "Young Man's Day" at Moscow. The initiative for this film which will consist of a series of short stories has come from the Soviet Peace Committee. It will speak about the striving of youth for peace and international friendship.

Taking part in the production of this film are cinematographers of the Soviet Union, China, Korea, Czechoslovakia, Rumania, Bulgaria, Hungary, France, Italy, Cuba, Uruguay, Japan and the Federal Republic of Germany.

The Soviet part of the film is being produced in Leningrad by Director Yury Ozerov and cameraman Vladimir Dombrovsky together with the well-known script writer, Georgy Mdivani.

The central character of the story is a Leningrad military engineer, Viktor Demidov, who is taking a course at an institute in Leningrad. In recent years Viktor Demidov has deactivated numerous unexploded German shells and mines left over from the 900-day defence of Leningrad. Viktor Demidov loves music and is an amateur painter.

FILM INDUSTRY IN RUSSIA

Eight hundred seventy-nine feature, popular science and documentary films and over 1,300 newsreels were produced by the 37 Soviet film studios last year.

Total attendance drawn by Soviet and foreign films in the country was 4,200 million in this period. These figures were cited at a two-day Conference of Film-workers in Moscow in March 1961.

Never before have Soviet motion pictures had such a wide showing in the world, it was stated at the Conference.

Soviet films are shown in 122 countries. The film "Fate of the Man" has now a run in 85 countries, the film "Ballade of a Soldier" has been purchased by firms in 56 countries. Negotiations continue concerning its release in other countries.

MORE CINEMA SEATS IN UZBEKISTAN

There are 47.5 cinema seats per every 1000 people in Uzbekistan, three times as many as in Turkey, and nearly 29 times more than in Iran and Pakistan. Two thousand two hundred film projecting installations are in operation in Uzbekistan with its population of 8,106,000. Cinema attendance has increased four-fold over the past 20 years. Special attention is devoted to the promotion of cinema in the rural areas of the Republic.

Plans are afoot to provide stationary cinemas on all state and collective farms by the end of 1961. By 1965 the number of cinema seats is to exceed 58,000. Best films are dubbed at the 'Uzbek Film' Studios in Tashkent.

FILM INSTITUTE GETS OFF TO WORK

The Film Institute of India, sponsored by the Union Ministry of Information and Broadcasting began functioning in Poona on March 20. It aims at providing all-round technical training in the production of films and facilities for research in film techniques. To begin with, a three-month refresher course has been started for technicians in the film industry, in cinematography, sound engineering and film editing. From July, the Institute will begin regular courses of two and three years' duration, in five subjects—film production, script writing, motion picture photography, sound recording and sound engineering and film editing.

Arrangements have been made to invite eminent film experts from abroad as "guest lecturers for both the refresher and the regular courses. It is also proposed to secure the services of teachers from abroad. The Film Institute of France has already offered its cooperation in this connection.

FILMS COMMEMORATE TAGORE CENTENARY

Two films to commemorate the centenary of the birth of Rabindranath Tagore

(1881-1941) which falls in May this year, are being produced by one of India's foremost film-makers, Satyajit Ray.

The first, a medium-length documentary on Tagore's life and work, was commissioned by the Indian Government. Scenes have been shot both in India and in England, where Mr. Ray studied material relating to the poet's life and visited Tagore's homes in London and Brighton.

The other work is a full-length feature film in three episodes based on three of Tagore's short stories.

* * *

YOUNG PEOPLE'S JURY AT VERSAILLES FILM FESTIVAL

More than half the cinema-goers in France today are young people aged less than 25. With this in mind, the organizers of the Second Versailles Film Festival, held early in March under the Patronage of M. Andre Malraux, French Minister of Cultural Affairs, decided to associate youth in their efforts.

A jury made up of selected representatives of the youth of France—fifteen students from the Faculties of Letters, Law, Science and other schools in Paris—were shown documentary and feature length films from a number of European countries as well as from the United States and Canada.

They awarded the first prize—the Golden Sun award—to the short picture, *Lines (Horizontal and Vertical)*, produced by Norman McLaren of Canada, and the Silver Sun award to the full-length feature, *The White Dove*, produced by Frantisek Halas of Czechoslovakia.

* * *

GOLDEN GLOBE AWARD

Gina Lollobrigida, the film star, was awarded 'Golden Globe' as "the world's favourite actress" at an annual dinner held by the Hollywood Foreign Association on March 16.

Rock Hudson and Tony Curtis both won the 'world's favourite' actor award.

The 'Golden Globe' nominations were based on a poll of about one and a half million film fans in 50 countries abroad.

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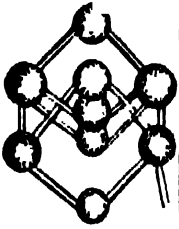
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SCIENCE

& INVENTION

HOW TRANSLATING MACHINE WORKS

"Sixth decade XX century represents one of the most stirring pages history humanity. Socialist country Europe and Asia, population that constitute more billion man, successfully move along the way of building socialism and communism. With all increasing speed goes process releasing peoples many country, during the period of centuries former colonies imperialistic state."

This is what the first paragraph of an article which appeared last year in Pravda, the Russian newspaper, looks like after being translated from Russian to English entirely by machine.

The need for rapid and extensive translation of Russian documents into English has been cited often in recent years and a new Air Force Translator, the Mark I, is the first step aimed ultimately at complete machine translation.

"Rough but meaningful English" is how the results of the present translating machine are described. To make it completely meaningful requires slight editing, but the gist of the message is certainly apparent. And at a fraction of the cost of human translation—which runs about a dime a word. The Mark I, developed in cooperation with the Air Force by International Business Machines Corporation, is a fascinating and complex machine. It works like this.

A secretary copies the Russian text to be translated on a special typewriter which automatically converts the Russian characters into coded holes punched on a paper tape.

The tape is then fed into the translating machine where the magic begins. The heart of the system is a glass disc which, in effect is an "automatic dictionary." The disc might be likened to a phonograph record. Near its outer edge are 700 concentric grooves or tracks, microscopic in size, which contain, in coded form, each Russian word, idiom and punctuation mark along with its English equivalent. The code resembles a series of black and white spots, each set of spots meaning one Russian

word. About 55,000 Russian word stems are on the present disc.

Now, when a Russian word, in code, enters the machine from the type-writer, a sharp beam of light begins to pick its way over the 700 tracks in search of the series of black and white spots which exactly represent that word. This is similar to you or me—flipping through the pages of a dictionary in search of the word we are looking for.

As the light beam focuses on the tracks, the disc rotates 1,400 times per minute—so it never takes longer than 1/30 of a second to find the right word. As soon as the beam of light finds the correct word, the corresponding English words are immediately printed out on a typewriter at the other end of the process. Speed of translation now is limited only by the speed of the tape moving into the machine and the typewriter output.

When the machine comes across a Russian word that it does not "know," that is, one which is not stored on the memory disc, it types out that word in original Russian—and in red type. It also prints in red any proper names or nouns which must be "transliterated," or changed from the Russian alphabet to ours.

"Grammar of the electronic translator is still well below college level," technicians admit, but work in progress now soon will provide means whereby sentences can actually be analyzed grammatically so that much smoother English will result.

* * * SUPER-SPEED MACHINE READS, TAPES INFORMATION

An electronic reading machine that instantly translates what it reads into business language and punches the information on tape is being manufactured in the United States.

Modified and coupled with a special computer, it would translate foreign language copy into English at the rate of 2½ lines a second.

The machine, in commercial production by the Farrington Manufacturing Company

of Needham, Massachusetts, was described as the "world's first commercial page reader" at a demonstration in Washington.

Numerous data processors "read" numerals such as appear on credit cards and bank cheques, but none heretofore read the written word. The Farrington Numcilo-Alphabet Optical Scanner, as it is called, reads and digests entire pages of copy.

Six large insurance firms have ordered the machine, priced at \$123,000 each, to read premium-due notices returned by policy-holders with payments. The machine is capable of handling 1.5 million notices in eight days, a task that now takes batteries of clerks and accounts months to perform.

An improved model with a capability of 340 characters—letters of the alphabet, numbers and punctuation marks—per second is being built, a company spokesman said. It will record output on magnetic tape rather than on paper tape.

* * *

FERTILISATION OF DESERTS

An Oxford scientist has discovered a substance that may fertilise deserts.

The new discovery is an organic compound named alginuric, which acts as a soil conditioner and can make "dead" soil cultivate in a few hours.

The discoverer, Mr. C. W. Bonniken, a technical director of Oxford Horticultural Laboratories Ltd, has formed a company to make alginuric from Norwegian seaweed.

* * *

CHARM OF MUSIC

Two high school students of Selma (Alabama, U.S.A.) conducted an agricultural experiment by subjecting one match of maize seedlings to a steady "diet" of rock-'n-roll music from two gramophones at full volume for 10 hours a day and keeping another set up seedlings in silence. The result: the maize subjected to rock-'n-roll grew to eight feet, the other to only five feet in the same time.

* * *

BEE CAN DETERMINE SUN'S POSITION

Bees can determine the position of the sun even when it is below the horizon. Austrian Professor Karl Frisch has discovered.

Prof. Frisch discovered the ability of the bee to orient itself from the sun's position, as a result of the special construction

of its eyes, which function like complicated optical instruments.

* * *

CHILD-BIRTH MADE PAINLESS

At Italian doctor, Prof. Adriano Vaccari has developed after 30 years of study and experiments, a new treatment to make child-birth painless by means of three injections it was learned at Genoa (Italy) on March 18, 1961.

Dr. Vaccari, 70, intends to present a complete report on the treatment at the forthcoming Congress of the "Obstetrics and Gynaecology Society" at Genoa.

He was an assistant of Marie and Pierre Curie when they discovered radium in Paris. He introduced radium into Italy in 1930 and at about the same time, became director of the Genoa Institute of Pathology.

Dr. Vaccari told the press, "With the injections, the child is born in a state of light somnolence, which lasts 90 seconds only. The mother feels no effect from the injections, not even a slight discomfort."

No information was given about the 'wonder' liquid, which was contained in the small phials.

Italian medical circles say that of other methods of painless child-birth the "psycho-physical" method is more a 'moral preparation' of the mother than a pain-relieving process, and the total anaesthesia method as practised in the United States, is dangerous for the mother and child.

* * *

DANGER OF CIGARETTE-SMOKING

The packet-a-day cigarette smoker probably cuts eight years of his life and the two-packet man probably loses 18 years, Dr. Linus Pauling, Noble Prize winner in chemistry, said at Toronto on March 23, 1961.

The average smoker, Dr. Pauling said, reduces his life span by triple the time he spends smoking cigarettes. To smoke for an hour was three times more dangerous than an hour's flight in a jet airliner.

* * *

EVIDENCE OF LIFE ON OTHER PLANETS

United States scientists think they have found proof of life existing on other planets, through examination of a meteorite, which fell in France in 1864.

The meteorite's fragments were found

to contain traces of a wax-like substance, originating, in living matter, a hydrocarbon of a type found widely on earth. The scientists said the hydrocarbon found was like that of certain marshy regions, particularly Sumatra.

The meteorite was seen by many people when it fell 97 years ago, exploding as it entered the atmosphere. About 20 fragments were recovered, one as big as a human head, another of the size of a fist.

The scientists, Dr. Bartholomew Nagy and Dr. Douglas Hennessy of Fordham University and Dr. Warrenmeinschein of the Esso Oil Company, revealed their findings in a report to the New York Academy of Science. Their meteorite fragments had been given them by the New York Natural Science Museum, they said, and they had no doubts about their meteoric origin, or of the absence of contamination. They now want to do more tests on other meteorites, or other pieces of the same one.

* * * *

WHAT CAUSES SHIVERING

The mechanism that controls shivering has been located.

Physiologist Douglas Stuart of the University of California Medical School, Los Angeles, has found a region in the rear portion of that part of the brain known as the hypothalamus that apparently initiates the shivering response.

When this region is electrically stimulated via a tiny electrode in experimental animals, they will shiver as if they were cold. When the same region is destroyed, the animals are unable to shiver in the presence of cold.

Shivering is nature's way of generating heat economically, Mr. Stuart points out. It produces heat without external work, such as is necessary in running or jumping up and down.

In order to warm up the body appreciably shivering requires another action simultaneously. This involves a constricting of surface blood vessels, which helps preserve heat that would otherwise be dissipated into the air. This action also is controlled from the hypothalamus but from another portion of it.

* * * *

CHANGE IN SPEED OF EARTH'S MOVEMENT

Two Soviet scientists suggest an origi-

nal explanation of the causes of the sharp change in the speed of the revolution of the earth around its axel, recorded by many observatories of the world in July 1959.

(The duration of one day then increased by 0.85 milli-seconds and then began decreasing).

Professor Nikolai Pavlov, the Chief of the Time Service of the Pulkovo Astronomical Observatory, and Astronomer Gen-nadi Staritsin arrived at the conclusion that this was due to a displacement of the phase of the ordinary annual seasonal change in the speed of this revolution.

The phase of the ordinary annual change in the speed of the revolution of the earth around its axel began one month earlier than usual, Professor Pavlov and his colleague point out.

This was due to the abnormally early spring that set in Northern Eurasia and affected the seasonal atmospheric circulation. It is this circulation that is regarded by some scientists as the cause of the seasonal change in the speed of the earth's movement.

Many foreign scientists believe that the phenomenon recorded in July 1959 was due to the strong magnetic storm that occurred a few days earlier and caused by the corpuscular eruption of the sun.

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"SHPOLSKY EFFECT" IN SPECTRAL ANALYSIS

The Presidium of the U.S.S.R. Academy of Sciences has awarded to Soviet scientist Eduard Shpolsky the Sergei Vavilov Gold Medal given once every three years for outstanding works in the field of physics.

Eduard Shpolsky has discovered a glow of a special kind, distinguished by extremely narrow spectral lines which are emitted by some organic substances when introduced into special solvents frozen to a temperature of 196 degrees Centigrade below zero.

Speaking at a meeting of the Academy's Presidium, Nobel Prize winner Academician Igor Tamm pointed out that Shpolsky's method of spectral analysis is now widely employed not only in the USSR but also abroad, especially in France and Britain.

Shpolsky's work in linear spectra of luminescence in crystalline frozen solutions

are of great scientific and practical importance. They permit to investigate the minutest peculiarities of a substance's crystalline state.

This is very important from the practical viewpoint because the "Shpolsky Effect" permits to detect insignificant admixtures of complicated organic substances in water, in the air or any other medium.

WANDERING POLES

Recent studies of the earth's spin have revealed new data on the internal structure of the globe.

The earth does not revolve uniformly, as scientists once thought. Besides changing its position in space the earth's axis wobbles, as it were, with the result that the poles wander over the surface. For more than sixty years now astronomers have been tracing this polar wandering. Soviet astronomers, in particular the workers of the Poltava Gravimetric Observatory of the Ukrainian Academy of Sciences, are engaged in comprehensive studies about this phenomenon.

Theoretically speaking, the poles will wander differently depending on whether the earth is more solid or more resilient. Actually the paths followed by the wandering poles suggest that the earth as a whole possesses twice the hardness of steel. If we regard the earth as a resilient body we could not explain all the complexity of the movement of its axis in space, known as nutation.

So far we have been unable to determine whether, besides wobbling, the poles wander gradually in some general direction. But many scientists consider that the North Pole is moving towards America at the rate of about eight metres a century. Small as this speed is, in the course of geological periods it can build up into great distances and provide an explanation for the change of climate in different parts of the world.

In recent years it has been discovered that the speed of the earth's spin, and consequently the length of the day, is also not uniform. Probably inside the planet processes take place which alter its size and shape.

With time measurements now carried out by extremely accurate atomic and molecular clocks astronomers have been able to trace the minutes' alterations in the earth's

spin. It is possible that soon we shall be able to penetrate into the machinery of processes taking place at depths still barred to man.

At the July 1960 Congress of the International Union of Geodesy and Geophysics in Helsinki, Finland, scientists came to the conclusion that observation of pole wandering and spin variation will be more important than ever in studying the internal structure of earth. A programme of international co-operation in this sphere has been drawn up.

COSMIC ORIGIN OF TEKTITES

The cosmic origin of tektites—small fused pieces of glass—has been established by Soviet research workers as a result of a discussion held at a special meeting of the meteorites committee of the Ukrainian Academy of Sciences in Kiev. This idea found firm support in the report by Genady Vorobyev of Moscow who for many years had studied their composition.

In particular the cosmic origin of these natural siliceous formations found on large areas in Czechoslovakia, Indo-China, Australia and many other places of the globe is also attested by the isotopic composition of some of their elements.

Recently the absolute age of tektites has been established at close to three billion years.

HARD GAS

This gas you can take in your hands. It is light yellow in colour and can be cut with an ordinary knife like cheese. It is manufactured at the experimental factory of the Moscow Research Institute of Combustible Minerals.

Neither snow nor strong wind can put out the flame of this new fuel and there is naturally quite a big demand for it—from geologists, Antarctic explorers, hunters and people who go camping for their holidays.

It is made in a centrifuge, a mixture of butane and liquid plastic being beaten into a foam. When the foam sets and hardens drops of butane are encapsulated by the innumerable plastic cells. Then the mass is briquetted and is ready for transporting without any special packing. If a piece is cut off from this brick fuel and a match put to it, it ignites instantaneously.

Antarctic explorers have made use of this hard gas at a temperature of 84°C. below zero.



DR. D. S. KOTHARI

Fifty-five-year-old Dr. D. S. Kothari, an eminent physicist, has been appointed Chairman of the University Grants Commission in succession to the late Dr. V. S. Krishna who died in New Delhi on February 16 after holding the office for nearly a month.

At the time of his appointment, which was announced on February 24, Dr. Kothari was Professor and Head of the Department of Physics at Delhi University. In addition, he also held the office of the Scientific Adviser to the Defence Ministry and Chairman of the Research and Development Advisory Committee of the Defence Ministry.

He was also a member of the governing body of the Council of Scientific and Industrial Research and chairman of its aeronautical research committee.

Dr. Kothari who recently headed an expert committee of the Defence Ministry which went to the U.S.S.R. for the purchase of transport aircraft for the Indian Government, joined Delhi University in 1934 as a Reader.

Educated at Allahabad and Cambridge, from where he procured a Ph.D. degree, Dr. Kothari has been credited with pioneer research work in the field of physics. His work on "pressure ionisation" theory, which he applied to explain constitution of 'white Dwarf Stars' and planets was hailed as a work of considerable importance by physicists all over the world.

He has also written numerous books. He is the author of "Nuclear Explosions" published by the Government of India and translated into German and Japanese.

Dr. Kothari has been President of the Indian Physical Society, Vice-President of the National Institute of Sciences of India, and President of the physics section of the Indian Science Congress. He has been elected General President of the Indian Science Congress for its Jubilee Session to be held in 1963.

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SIR PAUL GORE-BOOTH

Sir Paul Gore-Booth has recently succeeded the seasoned, genial Malcolm MacDonald as the new U.K. High Commissioner in India. He brings with him the rich and vast experience of many years' post-war reconstruction activities. His knowledge of problems associated with the pattern of post-war reconstructions will greatly help India and the United Kingdom to comprehend and cooperate more closely in accelerating India's industrial progress during the Third Plan period.

Sir Paul Gore-Booth has seen considerable service in Asia. He was British Ambassador in Burma during the years 1953-56, a period when Burma, along with India, was experiencing the throbs of new-won freedom and wrestling with the numerous problems flowing from it and at the same time laying the foundations for economic development.

Sir Paul Gore-Booth was born in February 3, 1909 and was educated at Eton and at Balliol College, Oxford. He joined the Foreign Service in 1933 and after three years of training went to Vienna. In December 1937, he went to Tokyo, and during his stay there learnt Japanese. During the crucial year of the Second World War (1941) he was sent to Shanghai.

In December 1942 he went to Washington and remained there until after the end of World War II, and took part in the important conferences there which helped to shape the pattern of post-war world.

He was a member of the United Kingdom delegation to the International Food Conference at Hot Springs and the UNRRA Conference at Atlantic City in 1943. He took part in the Dumbarton Oaks conversations and attended the Civil Aviation Conference in Chicago in 1944.

In 1945 he was a member of the British delegation to the San Francisco Conference.

Sir Paul Gore-Booth returned to London in October 1945. He was the Secretary of the U.K. delegation to the first sessions

of the United Nations General Assembly, in London in January and October 1946 and again in 1947. Towards the end of 1947, he became Head of the United Nations (Economic and Social) and Refugees Department of the Foreign Office.

In February 1948, he was transferred to be Head of the European Recovery Department. He returned to the United States at the end of 1948, as Director of British Information Services, a post he held for four years.

Then followed his appointment as Ambassador in Burma, after which he returned to the Foreign Office and was promoted Deputy Under-Secretary of State in charge of economic affairs. Later he became one of the Deputy Under-Secretaries of the American Department of the Foreign Office, particularly concerned with North America.

Thus his continued association with major and minor problems of patterns that went to remodel the countries that were devastated by war as well as countries that emerged as independent nations in the wake of the Second World War, has made him one of the really knowledgeable peoples on the subject. This, together with the maturity, pragmatism and discretion for which the British Foreign Service is justly famous, makes his assignment to India at this juncture very welcome and opportune and should help this country and the United Kingdom to forge fuller understanding and better coordination and extend greater assistance to tide over India's difficulties in successfully seeing through the Third plan.

Sir Paul Gore-Booth was created C.M.G. in 1949 and K.C.M.G. in 1957. He married Patricia Mary Ellerton in Tokyo in 1940. They have two sons, twins, aged 16, and two younger daughters.

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DEAN RUSK

Mr. Dean Rusk took charge of the office of the Secretary of State, U.S.A. on January 20, 1961. He is not a professional politician and as such had not been popularly known even in his own country. But he has a distinguished career as an academician and public servant, is an expert on Far Eastern Affairs, and a convincing and effective speaker. In knowledgeable circles it is opined that with a strong President to shoulder the responsibilities of leadership

of the nation, the duties of the Secretary of State would only be to offer expert advice in the formulation of policy and the willingness to be led by the President.

Mr. Dean Rusk brings with him nine years' experience of administration in the Rockefeller Foundation. During these nine years Mr. Dean Rusk, as President of the Rockefeller Foundation, came face to face with the economic and social problems and developments in all parts of the world, especially in Latin America, Asia and Africa, and his knowledge in this respect will certainly help him mould the foreign policy of his country directed towards the establishment of world peace.

Mr. Rusk was born on a small farm in Cherokee County, Georgia, on February 8, 1909. He went to public schools in Atlanta, and attended Davidson College in North Carolina graduating in 1931 with a Bachelor of Arts degree and Phi Beta Kappa honours.

Having won a Rhodes Scholarship, Mr. Rusk attended St. John's College, Oxford, England, during 1931-34. He was graduated with Bachelor and Master of Arts degrees. He took additional studies next at the University of Berlin.

From 1934 to 1940 he was associate professor of Government at Mills College, Oakland, California. During the latter part of this period, he was dean of the faculty. He also studied, during 1937-40, at the University of California.

With World War II looming, Mr. Rusk went on active duty, in December 1940, as a captain in the Army Infantry Reserve. During the war his energy, dedication and quick grasp of complexities converted Mr. Rusk from a scholar into Deputy Chief of Staff for U.S. Armed Forces in the China-Burma-India theatre. When the war ended, Mr. Rusk held the rank of Colonel.

Then he went to work for the War Department, handling political questions. Mr. Rusk's abilities came to the attention of the State Department, which recruited him to deal with United Nations planning.

The War Department induced Mr. Rusk to return to serve as a Special Assistant to the Secretary in the Pentagon. However, in 1947, Secretary of State Acheson gave him the job of running the office of United Nations Affairs.

Mr. Rusk's rise in the State Department continued. He was named Deputy Under-Secretary of State in Charge of Operations in 1949. In March, 1950, he was appointed Assistant Secretary of State for Far Eastern Affairs.

It was during this tenure, before he resigned in 1952 to become head of the Rockefeller Foundation, that he took part in decisions concerning the Korean War, defence of Taiwan against Chinese Communists, the recall of General MacArthur and the Japanese Peace Treaty.

Mr. Rusk has a charming wife, the former Virginia Foisie of San Francisco, and they have three children—David, now 20, Richard, 14, and Margaret, 11.

Those closest to Mr. Rusk—those who have watched his career—agree with President Kennedy that he is the "best man available" for the top Cabinet post as Secretary of State.

* * *

KING MOHAMMED V

King Mohammed V of Morocco died in Rabat on February 26 from heart failure a few minutes after the completion of a nasal operation, which was officially described as of a minor character. He was 51 years of age.

Sidi Mohammed Ben Youssef was a descendant of the Sultan Moulay Ismail (reigned 1672-1727), the first sovereign of the Alaouite dynasty. The third son of the Sultan Moulay Youssef, he succeeded to the Moroccan throne in October 1927 on the death of his father, the French authorities having preferred him to his two elder brothers. During and after the Second World War he identified himself with the movement for national independence and became increasingly associated with the Istiqlal nationalist party, resulting in considerable tension with the French Administration. By 1953 disquiet at the growing power of the Istiqlal culminated in a petition for the Sultan's deposition by 270 pashas and caids, who protested at what they regarded as the Sultan's intransigence in negotiations with the French authorities over a programme of reforms, and also accused him of departing from Moslem orthodoxy. The Opposition movement was led by the pro-French Pasha of Marrakesh. El Glaoui, who called out his Berber tribesmen from the hills, declared the deposition of Sidi Mohammed, and proclaimed Mohammed Ben Moulay Arafa as Sultan.

In August 1953 the French authorities exiled Sidi Mohammed and his family on the ground that it was impossible to uphold him without the risk of civil war. He was at first restricted to Corsica, but in January 1954 was removed with his family and household to Madagascar, which was assigned as his permanent place of residence. Meanwhile the independence movement continued to gain strength in Morocco itself, the position of Ben Arafa became increasingly insecure, and the return of Sidi Mohammed was strongly demanded by the Istiqlal and other nationalist forces. In the autumn of 1955 the French Government introduced a programme of reforms which included a larger share in the Government for the nationalists, the retirement of Ben Arafa, the appointment of a Regency Council, and an invitation to Sidi Mohammed (who had meanwhile been visited in Madagascar by General Catroux, representing the French Government) to take up residence in France. In October of the same year El Glaoui, who had played a leading part in the Sultan's deposition two years before, called for his immediate restoration a *volte-face* which ended all internal opposition to Sidi Mohammed's return.

Reinstated as *de jure* Sultan on November 6, 1955, at a ceremony at his residence near Paris, Sidi Mohammed returned to Morocco in triumph after 27 months' exile, formed a Cabinet, began to carry out a large-scale programme of political and judicial reforms, and successfully concluded agreements terminating the French and Spanish protectorates. The complete independence of Morocco was recognized by France under an agreement signed in Paris on March 2, 1956 and by Spain in a joint declaration signed in Madrid on April 7, 1956. Sidi Mohammed, who in 1957 changed his title from Sultan to King, personally took over the premiership in May 1960 after a political crisis which led to the dismissal of M. Ibrahim's Cabinet.

Widely respected throughout the Moslem and Western worlds, King Mohammed consistently aimed at the Modernization of his country; apart from the complete restoration of Moroccan independence his reign was noteworthy for far-reaching reforms in agriculture, education, the judiciary, and in political and constitutional life. He was buried in Rabat on February 28, 1961.



FOREIGN EVENTS

CONFERENCE OF COMMONWEALTH PRIME MINISTERS

The tenth conference of Commonwealth Prime Ministers, held in London from March 8 to March 17, 1961, was marked by (1) the withdrawal of South Africa from the Commonwealth with effect from May 31 (when the Republic of South Africa will be proclaimed), following strong condemnation of the Union Government's racial policies by the Afro-Asian members and by Canada; (2) the admission of Cyprus and Sierra Leone to Commonwealth membership (in the latter case from April 27, when Sierra Leone becomes independent); and (3) a declaration on disarmament calling for "the complete abolition of the means of waging war of any kind" and "for the renewal of disarmament negotiations as speedily as possible."

The conference, held at Lancaster House, was attended by the following Commonwealth statesmen: Mr. Harold Macmillan, Prime Minister of the United Kingdom, who presided; Mr. John Diefenbaker, Prime Minister of Canada; Mr. R. G. Menzies, Prime Minister of Australia; Mr. K. J. Toiyokoake, Prime Minister of New Zealand; Dr. H. F. Verwoerd, Prime Minister of South Africa; Mr. Jawaharlal Nehru, Prime Minister of India; Field-Marshal Ayub Khan, President of Pakistan; Mrs. Sirimavo Bandaranaike, Prime Minister of Ceylon (the first woman to participate in a Commonwealth Premiers' conference); Tengku Abdul Rahman, Prime Minister of Malaya; Dr. Kwame Nkrumah, President of Ghana; Sir Abubakar Tafawa Balewa, Prime Minister of Nigeria; and Sir Roy Welensky, Prime Minister of the Rhodesia and Nyasaland Federation. Archbishop Makarios, President of Cyprus, joined the other statesmen during the conference after Cyprus had been admitted to Commonwealth membership.

Apart from President Nkrumah, who was attending the resumed 15th session of the U.N. General Assembly, all the Commonwealth statesmen participated at the first two conference sessions on March 8, at which Ghana was represented by her

Foreign Minister, Mr. Ako Adjei; a brief official communique said that the Prime Ministers had "devoted the first day to a general exchange of views on the world situation, in which all took part." It was understood that Mr. Nehru had taken a prominent part in the debate and had laid special emphasis on the need for world disarmament.

Further sessions on March 9 and 10 were devoted mainly to discussions on disarmament and the banning of nuclear tests, no communiques being issued. The participants included President Nkrumah, who arrived from New York on March 9 and who was asked at London Airport whether he intended to vote for South Africa's exclusion from the Commonwealth. In reply, Dr. Nkrumah said that if nobody else brought up the question of South Africa "we shall have to do so," but added: "I shall look round the conference table and see the general reaction (i.e. to South Africa's application for continued Commonwealth membership when she became a republic). . . . Personally, I wish for no showdown on South Africa."

After a week-end recess, during which Mr. Macmillan had talks with a number of Commonwealth Premiers at Chequers, the conference began consideration on March 13 of South Africa's application to remain in the Commonwealth after she became a republic on May 31. The conference held two sessions (both restricted) lasting seven hours in all, each Prime Minister being accompanied by only one senior adviser (Mr. Macmillan was accompanied by the Commonwealth Relations Secretary, Mr. Duncan Sandys); Sir Roy Welensky was absent from the discussions on South Africa, in view of the fact that the Rhodesian Federation is not a fully independent state and he was attending the conference by a courtesy convention. Prepared statements were made by all the Commonwealth statesmen present, including Dr. Verwoerd. Although no official statements were issued, it was known that all the Afro-Asian members, and also Canada, had expressed the

strongest criticisms of the Union Government's **apartheid** policy.

When the conference reconvened on March 14, it was unanimously agreed to admit Cyprus to Commonwealth membership, following the application by President Makarios after the resolution adopted by the Cyprus Parliament on Feb. 16. It was agreed that the Archbishop should be immediately invited to attend the conference, and Mr. Macmillan accordingly cabled an invitation to Nicosia. President Makarios immediately flew to London, where he arrived the same afternoon.

After admitting Cyprus to Commonwealth membership the Prime Ministers continued their discussion on South Africa's application which was again debated in restricted session for nearly seven hours. As on the previous day, no statements were issued.

In the evening of March 15, after further long discussions, Dr. Verwoerd informed the other Prime Ministers that South Africa would withdraw from the Commonwealth on May 31. (The Union of South Africa had been a member of the Commonwealth since its creation in 1910 by the union of the self-governing colonies of Cape of Good Hope, Natal, Transvaal, and Orange River.)

The text of Dr. Verwoerd's statement to the conference, announcing South Africa's withdrawal from the Commonwealth, was released the same evening at South Africa House. In this statement Dr. Verwoerd said *inter alia* that he had been "shocked by the spirit of hostility and vindictiveness shown towards South Africa"; that, in view of "the lead given by a group of Afro-Asian nations," it was clear that South Africa would not be welcome as a Commonwealth member when she became a republic; and that it was "ironical" that charges of oppression and discrimination in South Africa had come from "Prime Ministers in whose countries oppression and discrimination are openly practised and where the basic principles of democratic government are flouted," adding that he referred "particularly to Ghana, India, Malaya, and Ceylon." Dr. Verwoerd expressed the opinion that the conference proceedings "mark the beginning of the disintegration of the Commonwealth."

Dr. Verwoerd attended the Prime Ministers' morning conference on March 16, at

which Sierra Leone's application for Commonwealth membership was unanimously approved; in the afternoon he was received in audience by the Queen at Buckingham Palace, and was understood to have reported formally to her Majesty on South Africa's decision to withdraw from the Commonwealth.

Dr. Verwoerd remained in London until after the conference had ended, participating in its final session. In a statement at London Airport on March 19 before leaving for South Africa, he said that "our opponents who wanted us out of the Commonwealth have won their wish but lost their cause"; he added that friendship and trade between Britain and South Africa, "as well as our other friends," would continue to "flourish and grow to the mutual benefit of all."

At its session on March 16, the conference agreed to Sierra Leone's membership of the Commonwealth; debated the problem of disarmament; and also discussed a number of other questions, including the Laos and Congo situation and the organizational structure of the United Nations. It was understood that Dr. Nkrumah took a prominent part in the Congo debate and reiterated his view (expressed at the U.N.) that the Congolese question should be handled by the African nations and that "African units" should be primarily responsible for law and order; according to press reports, however, this view was opposed by Mr. Nehru, Sir Abubakar Tafawa Balewa, Mr. Diefenbaker, and other Commonwealth Premiers.

The conference ended on March 17 with the publication of the final communique which contained no direct reference to South Africa's withdrawal from the Commonwealth.

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THE LAVON CASE OF ISRAEL

The Israeli Cabinet resigned on January 31 as the result of a prolonged controversy over the circumstances in which Mr. Pinhas Lavon had resigned the post of Defence Minister in 1955.

Mr. Lavon (56) was born in S.E. Poland and emigrated to Palestine in 1928, when he adopted the Hebrew name Lavon in place of his former name of Lubianiker. Elected to the **Knesset** in 1949 as a **Mapai** (Labour Party) member, he served as Minister of Agriculture in Mr. Ben-Gurion's

Government in 1950-51 and Minister without Portfolio in 1952-54, and on Mr. Ben-Gurion's temporary retirement from public in 1954 succeeded him as Defence Minister in Mr. Sharett's Government. He resigned in February 1955, no reason being given; he afterwards became secretary-general of **Histadruth** (The General Federation of Labour) but had not held any ministerial office since his resignation. Mr. Ben-Gurion succeeded him at the Defence Ministry and later in the same year resumed the Premiership, which he has held ever since.

The incident became a political issue in August 1960, when a person accused of a criminal offence, who was tried secretly in Jerusalem and sentenced on November 20 to 12 years' imprisonment, alleged that two officers had urged him in 1955 to give false evidence against Mr. Lavon before a commission inquiring into a "disastrous security operation".

Although all foreign press reports on the subject were strictly censored, this operation was believed to be the activities of an Israeli spy ring in Egypt, which was discovered in July 1954 and was alleged to have set fire to the U.S. Information Service building in Cairo in order to disturb relations between Egypt and the U.S.A. Two members of the ring were hanged in January 1955; another committed suicide in imprisonment. At Mr. Lavon's request, a secret inquiry was held into his responsibility. Members of the security forces submitted documentary evidence purporting to show that he had ordered it; Mr. Lavon, however, maintained that they were forgeries and denied all knowledge of the operation. Major-General Moshe Dayan (then Chief of Staff) and Mr. Simon Perez (then Director-General of the Defence Ministry), who were known to have been in conflict with Mr. Lavon over policy questions, also gave evidence before the commission, Mr. Perez expressing the opinion that Mr. Lavon was unfit to run the Ministry. In view of the conflict of evidence, the commission reached no decision. Mr. Lavon then demanded the dismissal of Mr. Perez and one of the officers who had given evidence against him, and resigned when Mr. Sharett refused this demand.

Following the appearance of the new evidence, a military inquiry committee was set up under the chairmanship of Mr. Jus-

tice Haim Cohn, which reported on October 23, 1960, that a reserve officer, with the approval of a regular officer, had instigated a third man to give false evidence at the 1955 inquiry; the committee expressed no opinion on Mr. Lavon's responsibility for the "security operation", which it held was outside its terms of reference. The Cabinet appointed on October 31 a ministerial committee of seven, representing all the Government parties, to hold a new inquiry into the question. Mr. Ben-Gurion, who had earlier expressed strong opposition to the matter being handled on the political level and had insisted on an inquiry by a commission of jurists with subpoena rights to establish the truth, was not present at the meeting; in addition to his objections on principle, the Prime Minister was also opposed to the participation in the Cabinet inquiry of a representative of the left-wing **Mapam**, because a spokesman of that party had compared the Lavon case to the "Dreyfus affair."

The Cabinet endorsed on December 25 the findings of the ministerial committee, which exonerated Mr. Lavon from any responsibility for the "security operation". Mr. Ben-Gurion walked out of the meeting and did not take part in the vote.

The committee's findings led to an open split in the Cabinet. Mr. Ben-Gurion denounced them as "biased, a half-truth and a miscarriage of justice," threatened to resign, and ceased to attend Cabinet meetings. He bitterly attacked Mr. Lavon at a meeting of the **Mapai** central committee on January 12, accusing him of conducting a "poisonous war" of "backbiting and slander," and was reported to have threatened to resign the party leadership unless Mr. Lavon were removed from the secretaryship of **Histadruth**. He was supported by General Dayan, who had shown the Cabinet on January 1 two documents which, he alleged, proved that Mr. Lavon had given false evidence before the **Knesset** Foreign Affairs Committee when attempting to prove that the Army had sometimes carried out operations without orders. On the other hand, Mrs. Meir (Foreign Minister) and Mr. Saphir (Minister of Commerce and Industry), both of whom are members of **Mapai**, were reported to have threatened to resign in protest against the Prime Minister's conduct. Mr. Rosen (Minister of Justice and leader of the **Progressive Party**),

after appealing unsuccessfully to Mr. Ben-Gurion to accept the decision of the majority of the Cabinet, tabled a motion on January 15 for the Cabinet's resignation.

As a result of the intercession of President Ben-Zvi, Mr. Ben-Gurion in a letter published on January 20, apologised to the other members of the Cabinet, retracted his allegations of bias, and promised not to interfere further in the matter. The Cabinet, in the Prime Minister's absence, confirmed its decision exonerating Mr. Lavon on January 22, and rejected a motion by the two **Mapam** Ministers in favour of the Government's resignation. A motion of no-confidence in the Government was defeated in the **Knesset** on January 30 by 77 votes to 26; spokesmen for three of the Government parties (**Mapam**, **Ahdut Avoda**, and the **Progressives**), however, appealed to Mr. Ben-Gurion to accept the Cabinet's decision, and strongly criticized the **Mapai**'s intention of taking disciplinary action against Mr. Lavon.

On January 31 Mr. Ben-Gurion, who interpreted the statements made in the debate as personal attacks on himself, called a Cabinet meeting (the first which he had attended since December 25) and announced his resignation. He then presented to President Ben-Zvi his letter of resignation, in which he declared that he could not accept the Cabinet's decision of December 25 and described it as "incompatible with the fundamental principles of justice". Repeating his demand for a judicial inquiry into the Lavon affair, he said: "I hold democracy in Israel no less dear than any other citizen, and democracy means among other things the rule of law and the separation of powers between the legislature, the executive, and the judiciary." It was announced on February 1 that the Government would continue in office until a new Administration was formed.

Mr. Lavon was subsequently removed from the secretaryship of the **Histadruth**.

After consultations with party leaders, President Ben-Zvi called on Mr. Ben-Gurion on February 15 to form a new Government. Of the parties supporting the previous cabinet, however, only the small **Agudat Israel** agreed to enter a new Government under his leadership, provided that he banned the sale of pork, increased Sabbath restrictions, and made other concessions. The **Mapam**, **Ahdut Avoda**, and **Progressive**

decided not to participate in any Government headed by Mr. Ben-Gurion, although they were prepared to join a coalition headed by another **Mapai** Premier, whilst the National Religious Party was unwilling to enter a narrowly-based coalition. After an offer by Mr. Ben-Gurion to resign the party leadership in favour of Mr. Eshkol (the Finance Minister) had been rejected by the **Mapai** secretariat, he informed President Ben-Zvi on February 28 that he was unable to form a Government, and that a Bill for the dissolution of the **Knesset** and the holding of new elections would soon be introduced. The President, however, appealed to the Government parties on March 2 to solve the problem without elections, and the parties accordingly agreed to postpone action on the Bill while they studied his appeal.

President Ben-Zvi informed the **Knesset** on March 13 that he had found no reasonable possibility of anyone forming a new Government; the **Knesset** therefore decided later the same day to draft a Bill for its dissolution and fixing a date for general elections.

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CENSUS IN PAKISTAN

According to provisional census figures announced at a news conference in Karachi on March 3 by the Home Minister, Mr. Zakir Hussain, the population of Pakistan registered a rise of 23.7 per cent during the previous 10 years.

The total population, according to the 1951 census, stood at 75,866,000, while the provisional figure for the 1961 count showed a total of 93,812,000.

According to the count held in January, 1961, the population of East Pakistan was 50,844,000 and of West Pakistan 40,815,000.

In terms of percentages and increase Province-wise, it was estimated at 20.9 and 25.03 respectively.

The Federal territory of Karachi, including Lasbela District, registered a rise of 76.5 per cent. The population in this area rose from 1,220,000 to 2,153,000.

Of the total population inhabiting an area of 364,373 square miles, only 14,382,700 were literate, i.e. 15.3 per cent. The percentage of literacy area-wise was East Pakistan 17.6 per cent, West Pakistan 11.7 per cent and the Federal Territory of Karachi including Lasbela District, 31.3 per cent.

(Literates were defined on the basis of their ability to "read with understanding a short statement on everyday life in any language".)

In the whole of Pakistan, there were 2,604,303 unoccupied structures, 15,911,400 occupied residential houses and 16,338,764 households.

Sex-wise break-up figures for the 1961 census in East Pakistan was 26,522,000 males and 24,322,000 females; in West Pakistan 21,748,000 males and 19,067,000 females; in the Federal territory 1,215,000 males and 938,000 females.

East Pakistan was the most densely populated area. The density of population there was 922 persons per square mile as compared to 136 in West Pakistan. The Federal Territory had a density of 256 persons per square mile.

Karachi was the biggest city with a population of about 2,000,000. Lahore came second with a population of about 1,300,000.

(The census figures did not include the population of Jammu and Kashmir, Gilgit and Baltistan, under Pakistan occupation.)

PRESIDENT KENNEDY SETS UP PEACE CORPS

President J. F. Kennedy announced on March 1, 1961, the establishment of a Peace Corps of young American men and women to serve overseas "in the great common tasks of bringing progress to under-developed areas. The President also signed an Executive Order setting up the Peace Corps as a pilot project, and sent a special message to Congress asking that the Corps be established by legislation on a permanent basis.

Announcing the formation of the Peace Corps at a news conference, the President said: "This corps will be a pool of trained men and women sent overseas by the U.S. Government, or through private institutions and organizations, to help foreign countries meet their urgent needs of skilled manpower. It is our hope to have 100 to 1,000 people in the field by the end of this year. We will send those abroad who are committed to the concept which motivates the Peace Corps. . . None of the men and women will be paid a salary. They will live at the same level as the citizens of the country which they are sent to, doing the same work, eating the same food, and speaking the same language. We are

going to put particular emphasis on those men and women who have skills in teaching, agriculture, and health."

In his Executive Order the President (1) decreed that the Peace Corps would be an agency in the State Department; (2) defined its functions as responsibility "for the training and service abroad of men and women of the United States in new programmes of assistance to nations and areas of the world, and in conjunction with or in support of existing economic assistance programmes of the United States and of the United Nations and other international organizations"; and (3) laid down that the Peace Corps would be financed out of funds available to the Secretary of State "for the performance of functions under the Mutual Security Act of 1954 as amended."

In his message to Congress the President stated that (1) the programme would be administered by the Youth Corps Agency in Washington, but would work through and with colleges and universities and private voluntary agencies; (2) volunteers would not be exempted from military service, would receive training varying from "six weeks to six months", and would serve two or three-year terms overseas; (3) the Corps would be open to all Americans "who are qualified" and would not be limited to young people or college graduates, although "undoubtedly the corps will be made up primarily of young people as they complete their formal education." He added that it was hoped "that within a few years several thousand Peace Corps members will be working in foreign lands."

Among the specific programmes to which Peace Corps members would contribute were: "teaching in primary and secondary schools," especially in the teaching of English; "participation in the world-wide programme of malaria eradication; instruction and operation of public health and sanitation; aiding in village development through school construction and other programmes; and increasing rural agricultural productivity by assisting local farmers to use modern implements and techniques. The initial emphasis will be on teaching."

The appointment of Mr. R. Sargent Shriver as director of the Peace Corps was announced by President Kennedy on March 5. Mr. Shriver (45), a brother-in-law of the President, had worked out details of

(Continued on page 477)

HOME AFFAIRS

PRESIDENT'S RULE IMPOSED IN ORISSA

On February 16, 1961, Dr. Hare Krushna Mahatab resigned from the leadership of the Orissa Legislature Congress Party. His resignation followed the election of Mr. Bijoyananda Patnaik, who was against the continuance of the coalition Cabinet, as President of the Utkal Pradesh Congress Committee.

Dr. Mahatab told newsmen that he had written to the Congress President, Mr. N. Sanjiva Reddy, asking him whether the party should stand by its earlier decision to continue the Congress-Ganatantra Parishad coalition Ministry or revise it. He added that if no reply was received by February 18 from the Congress President, he would submit the resignation of the coalition Ministry on that date.

The Congress President, Mr. Sanjiva Reddy, however, wrote to Dr. Mahatab asking him not to tender resignation of the Cabinet. Dr. Mahatab was asked to await further instructions from the Central Congress Parliamentary Board, which had sanctioned the formation of the coalition Government.

Mr. Bijoyananda Patnaik, the new President of the Utkal Pradesh Congress Committee, met the Congress President, Mr. N. Sanjiva Reddy in New Delhi on Feb. 18 and discussed with him the latest developments in Orissa.

On Feb. 19 the Chief Minister of Orissa, Dr. Hare Krushna Mahatab, informed the Congress President, Mr. Sanjiva Reddy on telephone that he would submit the resignation of the 22-month old Congress-Ganatantra Parishad coalition Ministry on February 21. The decision was reached after a prolonged discussion between Dr. Mahatab and the Pradesh Congress Chief, Mr. Bijoyananda Patnaik, who had returned to Cuttack on the same day after consultations with the Congress High Command in New Delhi.

The two leaders agreed that: (1) The Ministry should resign on February 21; (2) The Motion of Thanks to the Govern-

ment for his Address would be passed on Feb. 20 in the Assembly; (3) The Budget would not be presented on February 21; (4) The Congress Party would prepare for a mid-term election.

Dr. Harekrushna Mahatab, Chief Minister, tendered the resignation of the 11-member coalition Cabinet to the Governor of Orissa on Feb. 21.

Earlier in the day, the Speaker adjourned the Orissa Legislative Assembly sine die after a statement by Dr. Mahatab to the House that he had decided to tender resignation of the Ministry forthwith.

The Assembly earlier passed the motion of thanks to the Governor for his address to the House on Feb. 16. The entire Opposition had walked out objecting to discussion and passage of the motion.

The Orissa Legislative Assembly was prorogued by the Governor, Mr. Y. N. Sukhtankar, from February 22, according to a notification in an Orissa Gazette Extraordinary issued on Feb. 23.

President Rajendra Prasad on Feb. 25, dissolved the Orissa Assembly and assumed all the functions of the State Government under Article 356 of the Constitution.

The President, in a proclamation issued in New Delhi declared he was "satisfied that a situation has arisen in which the Government of that State cannot be carried on in accordance with the provisions of the Constitution of India."

On Feb. 27, the Governor of Orissa passed an order dissolving his Council of Ministers headed by Dr. Hare Krushna Mahatab, with effect from the evening of Feb. 25.

President's rule was enforced on five earlier occasions between 1951 and 1959. It was in force in Punjab from June 20, 1951 to April 17, 1962; PEPSU from March 4, 1953 to March 7, 1954; Andhra Pradesh from November 15, 1954, to March 28, 1955; Travancore-Cochin from March 23, 1956, to April 5, 1957; and Kerala from July 31, 1959 to February 22, 1960.

The Rajya Sabha unanimously approved on March 16 the President's proclamation taking over the administration of Orissa under Article 356. On March 8, the Lok Sabha had also approved the introduction of President's Rule in Orissa.

The Acting Union Minister for Home Affairs, Mr. Lal Bahadur Shastri, announced in the Lok Sabha on March 27 that mid-term election would be held in Orissa in the first half of June 1961.

Mr. Shastri said: "The Government does not desire to prolong the period of the President's Rule to about 14 months until the general elections. This appears particularly undesirable this year when the Third Plan is being launched and when it would be far better for a popular government to implement the new Plan for the first year."

The Acting Home Minister added that the Chief Election Commissioner was satisfied that the administrative steps to be taken could be completed within the time for the election to be held in the early part of June.

* * *

QUEEN ELIZABETH'S VISIT

Queen Elizabeth II of England, accompanied by the Duke of Edinburgh, arrived in New Delhi on January 21, 1961. The Queen, who was welcomed at the airport by the President, Dr. Rajendra Prasad, "not only as the Head of the oldest democracy in the world but also as the Head of a great commonwealth," said that she was "thrilled to be in India."

The President, Dr. Rajendra Prasad, gave a State banquet in honour of Queen Elizabeth and the Duke of Edinburgh the same evening (January 21). In his speech on the occasion, Dr. Prasad praised Britain's statesmanship in giving India her freedom gracefully and expressed his appreciation of Britain's generous help in the country's present industrial development.

The Queen, in her reply, praised the leadership of Dr. Rajendra Prasad and Mr. Nehru and said that Britain and the other industrially advanced Commonwealth countries were deeply conscious of India's needs and potentialities.

She departed from the text of her speech given to correspondents earlier to say: "And now I raise my glass to you, Mr. President, and to the people of India."

At a civic reception accorded to Queen Elizabeth in Delhi on January 21, the citizens of Delhi gave a standing ovation to the Queen.

Wearing a peach-coloured dress and a fur stole, the Queen smiled and waved to the vast crowds, ending her speech in Hindustani: "Aapke swagat ka hum sabki oor se shukriya". (For your welcome I thank you on behalf of all of us.)

In her speech the Queen said that her visit to India has been a wonderful experience and she and her husband had been deeply moved by the friendliness shown to them. She praised Mr. Nehru's leadership and said she was looking forward to seeing India's new achievements and plans.

Emphasizing the value of commonwealth ties in a troubled world, she described Indo-British friendship as one of "a special kind". The people of Britain and of the other Commonwealth countries would continue to help India in her struggle against poverty and disease.

In his speech on the occasion, Mr. Nehru said that the present friendly relations between India and Britain were the result of the stature and teachings of Mahatma Gandhi and he hoped the Queen would carry with her an abiding impression of the afternoon's welcome.

Wishing the Queen and her husband long life, the civic address, read by the Mayor, quoted a couplet of Mirza Ghalib, "May you live a thousand years; may each year be of fifty thousand days". The address described Delhi's chequered past and said that with India's independence the old relationship between India and Britain had given place to "the silken bonds of friendship and co-operation and goodwill to each other."

Delhi's gift to Queen Elizabeth was a beautifully-carved ivory Qutab Minar. The Duke received a table lamp in silver made in the form of a candle stand.

On January 22, the Queen and the Duke of Edinburgh left New Delhi for Jaipur. From Jaipur they went to Sawai Madhopur on January 23 and returned to New Delhi on January 25.

Next day (January 26), the Queen witnessed the Republic Day Parade in New Delhi and attended the President's reception. In the evening, she had dinner with the Commonwealth High Commissioners.

She spent January 27 and 28 in New Delhi and left for Agra on January 29.

From Agra, she went to Udaipur and Ahmedabad before going to Karachi on February 1 on a visit to West Pakistan. On February 16, she went to Dacca in East Pakistan and later on the same day, she arrived at Durgapur in India where a steel plant is being built with British assistance. She visited the Durgapur steel plant and township on February 17 before arriving in Calcutta the same afternoon. The Queen spent February 18, 19 and 20 in Calcutta and left for Madras and Bangalore on Feb. 21. She spent February 22 at Nandi Hills and left for Bombay on February 23. She remained in Bombay on February 24 and went to Banaras on February 25 and to Sarnath on February 26.

She left for Nepal on the afternoon of February 26.

From Khatmandu, Queen Elizabeth returned to New Delhi on March 1, and the same evening, she broadcast a farewell message to the people of India in which she said that her visit to India and the great welcome she had received had "set the seal on the new relationship between India and Britain and on the abiding friendship between the two peoples".

On March 2, Queen Elizabeth and the Duke of Edinburgh left India for Tehran (Iran) on a four-day visit.

INDIA'S NEW POPULATION FIGURES

The acting Home Minister, Shri Lal Bahadur Shastri, announced on March 27, 1961, the general results of the 1961 census at a press conference in New Delhi.

India's population is roughly 438 million (as on March 1, 1961); the 1961 census has recorded a rise of 70 million during the last decade. The record rise in the nation's populace has exceeded the expectations of experts. There has been an increase of 21.49 per cent over the 1951 census figures. Men in the country outnumber women by about 13 million.

Asked about the margin of error in the census figures, Mr. Mitra Registrar-General of India, who was present, said the 1961 census, in keeping with the tradition since the first 1872 census, was a complete count, and chances were that there was some under-count. In any case, the total figures would not be less than the provisional. He

did not expect the Indian percentage error to be higher than that in the West or on previous occasions in India. The margin of error in the 1951 census was 1.1 per cent.

Home Secretary Vishwanathan, asked about the deteriorating sex-ratio in India, said this was mainly because the proportion of younger people in India was much higher. All over the world the number of boys born exceeded that of girls. Due to the larger tenacity of life of females the number of females greatly exceeded that of males as the age-groups advanced specially in the age-group above 70.

The States of Andhra, Bihar, Jammu and Kashmir, Madras, Mysore, Orissa and U.P. have registered an increase below the average of 21.49 per cent overall rise, while Assam, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Punjab, Rajasthan and West Bengal have recorded a rise above the average. Assam has shown the highest decennial increase of 34.40 per cent and West Bengal comes next with 32.94 per cent.

Geographically, the States in the north-east and the north-west have shown a steep population rise. The density of population per sq. mile for the entire country works out to 384 as against 316 in 1951.

The order of the States in the percentage of their population to the total population of the country remains the same as in 1951 except for West Bengal and Madras interchanging places. West Bengal with 8.01 per cent of the total population of the Union, now occupies the fifth place while Madras occupies the seventh place, with 7.71 per cent of the total population.

U.P. tops the list with 16.90 per cent of the total population. Next in order are Bihar (10.64 per cent), Maharashtra (9.05 per cent) and Andhra (8.24 per cent).

Mr. Shastri announced that 4,050 silver medals and 8,1000 bronze medals would be presented by the Union Government for meritorious census work from amongst the 800,000 enumerators and 200,000 supervisory staff members. It has also been decided to give an honorarium of Rs. 24 to each enumerator for 700 persons counted.

He said the total census operations, including supervision and administrative charges, would cost nearly Rs. 2 crores.

India's population during the decade 1951-61 grew 61 per cent faster than the

rate at which it grew between 1941-51. The rate for 1951-61 is 21.49 while that for the earlier decade was 13.33. Nine States contributed more than others to this unprecedented increase.

As many as 133 or 59 per cent of the 312 district in 15 States have registered an increase above 20.5 per cent in the decade.

The number of cities with a population of more than a million has gone up from five to six or seven, the number and the order of precedence varying with the definition adopted.

Greater Bombay ranks first with 4.15 million and Calcutta second with 2.93 million, Delhi (including New Delhi, Shahdara and the Cantonment) third with 2.34 million, Madras fourth with 1.73 million, Hyderabad fifth with 1.25 million, and Ahmedabad sixth with 1.15 million.

If, however, the population of Calcutta (including 34 contiguous urban townships in a compact area of 164 sq. miles) is aggregated, "Greater Calcutta" ranks first with 5.55 million inhabitants. Similarly, "metropolitan Bangalore" has population of 1.21 million.

The density of population for the country works out to 384 per square mile as against 316 in 1951.

The highest urban density is to be found in Calcutta City (55,038). This compares with 22,293 per square mile in Greater Bombay and 35,208 in Madras.

The City-Sadar-Paharganj area of Delhi, however, has a density of 143,185 persons per square mile and the Karol Bagh-Patel Nagar area a density of 74,195. According to the provisional census report, these two areas "can be counted in the forefront of the world's highest density areas."

The sex ratio—the number of females per 1,000 males—is now 940 as compared with 946 a decade ago.

Literacy has registered a small increase from 16.6 per cent, in 1951 to 23.7 per cent, 1961. The "collective literacy rate" would, however, be higher if the 0-4 age group were excluded as is customary. This has not been possible at this stage as the age composition of the population has yet to be computed.

The test for literacy is satisfied if a person can both read and write with understanding.

The literacy rate is the highest in

Delhi, Kerala, the Andamans, Gujarat, Madras and Maharashtra in that order, and the lowest in Kashmir, Himachal, Rajasthan, Madhya Pradesh, Uttar Pradesh and Bihar in that order.

Female literacy continues to be far below male literacy, but again, oddly enough, the coastal belt generally exhibits a higher rate of female literacy than the other areas.

The actual count has not yet been completed and totalled in Manipur, NEFA, Nagaland and Sikkim. The population of the rest of the country is provisionally estimated at 436.42 million. The inclusion of the probable population of the outstanding areas would bring the all-India total to around 438 million.

The census operations in NEFA and Nagaland commenced in January, 1960 and will continue until the summer of 1964.

Of the enumerated population (of 436 million), 82.16 per cent, is rural and 17.84 per cent, urban. This compares with 82.62 per cent and 17.38 per cent, in 1951.

FOREIGN AFFAIRS

(Continued from page 473)

the Peace Corps programme at the President's request; it was announced that he would serve without pay and would give up his present post of assistant general manager of the Merchandise Mart in Chicago.

Within a few hours of President Kennedy's announcement thousands of young men and women had put down their names for enrolment in the Peace Corps.

Mr. R. Sargent announced on March 24 that members of the U.S. Peace Corps would begin their work overseas by the end of the year.

The West German Foreign Minister, Dr. Heinrich Von Brentano, said over television on March 5 that his country planned to set up a Peace Corps similar to that of the U.S. About 1,000 young people had reacted "positively" to inquiries about such a scheme.

"We should take care not to treat man, with his immense variety of prejudices and emotions, as just another statistical unit."

—H.R.H. Duke of Edinburgh

* * *

When you argue with a fool, be sure he isn't similarly engaged.—Dublin Opinion

Parliamentary Affairs

(March 6 To April 1, 1961)

INDIAN TROOPS FOR CONGO

In the Lok Sabha, on March 6, the Prime Minister, Mr. Nehru, explained the reasons that led India to place an armed Brigade at the disposal of the United Nations for service in the Congo.

He said that India had been dissatisfied with the U.N. operation in the Congo, but the position had changed to some extent with the passage of the recent resolution of the Security Council. It appeared to the Government of India that a more correct and effective policy would now be pursued by the United Nations. The three-power resolution in the Security Council had been sponsored after consultations with Asian and African countries and Shri Nehru said that a certain responsibility had been cast upon us. Also, Mr. Hammarskjöld's reply to India's communication seeking assurances in regard to the employment of combatant troops in the Congo was considered generally satisfactory.

The Prime Minister said India had informed the Secretary-General that the Brigade should function as a unit and should not come into conflict with any member of the United Nations.

TAX CONCESSIONS

Several tax concessions were announced by the Finance Minister when he wound up the Budget Debate in the Lok Sabha on March 17. He said the effective incidence of the increase in the excise on kerosene would be reduced by 50 per cent. Steps were also being taken to see that all kerosene which fell in the inferior category was quickly released from bond, so that it could be made available in different parts of the country. As there was no increase in the duty on this type of kerosene, there would be no increase in its price. Steps were also being taken to increase the import of inferior kerosene, to make it available in adequate quantities throughout the country.

As for inferior coffee which had no export market, the Finance Minister said he was prepared to consider giving it partial

exemption from the present increase of duty if suitable measures could be devised to distinguish such coffee and to avoid evasion.

Referring to complaints of increase in the prices of betel-put as a result of the increase in import duty, Shri Desai said the duty had been increased to mop up present large profits. Unless the importers took steps immediately to bring down the prices, Government would have to consider whether the issue of import licences should not be restricted only to those who could take effective steps in this direction.

Shri Desai said he would reduce by 50 per cent the incidence of compounded levy on units of 3 or 4 powerlooms which would be paying the excise on cotton cloth for the first time.

The Finance Minister said he proposed to exempt yarns of counts one to ten so as to benefit coarse cloth as well as cotton carpets woven on hand-loom. In the case of woollen carpets, he said a very large part of such carpets was exported and steps would be taken to see that they got full drawback of the duty on wool.

In the case of plastics and glass and glass-ware, the Finance Minister explained that the duty would be at one stage only—at the stage of powder, granule or flake in the case of plastics, and at the sheet and tube stage in the case of glass. Other items made out of duty-paid plastic powder or glass sheet or glass tube would not be liable to duty.

The value of all the concessions announced by the Finance Minister taken together is likely to be of the order of Rs. 4.5 crores.

The Finance Minister said he was seriously trying to find out methods by which Government could prevent the spurt in prices which had occurred since the budget proposals were announced.

Referring to complaints of monopoly capitalism, Shri Desai said the effort was to build a plateau and not pyramid. As in the public sector, there were major in-

dustries in the private sector requiring a large capital investment. Government policy was to give licences to new entrepreneurs wherever they were available and to see that industry was dispersed.

In his reply, Shri Desai regretted the tendency to raise in Parliament individual cases of Army promotions and said if a sensitive institution like the Army was bandied about in the manner it was, it would be a calamity for the nation.

NEHRU'S STATEMENT ON CONGO

The Prime Minister expressed the hope that the Great Powers who are the allies of Belgium will exercise pressure on her to withdraw her military and para-military forces as well as political advisors from the Congo. Shri Nehru, who was making a statement in the Lok Sabha on March 24 said: Belgian withdrawal was the most important question. India did not want that such withdrawal should be secured by war like measures and he was sure that if the great powers allied to Belgium wanted to, they could bring adequate pressure on her to withdraw from the Congo. Shri Nehru said the countries who were represented in the Congo, and these excluded the Soviet Union and its allies, had a certain responsibility for the present state of affairs. They had indulged in a kind of campaign against the United Nations and India, encouraging Mobutu and other persons to take a strong attitude. If Belgian troops and political advisors were withdrawn these elements would be weakened, making armed action unnecessary.

About the Indian combat troops in the Congo, Shri Nehru said they would do whatever they were told to do within the ambit of their work. If it was necessary for them to go to Katanga, Mr. Tshombe's threats would not deter them.

INFORMATION AND BROADCASTING

The Minister for Information and Broadcasting, Dr. Keskar, announced in the Lok Sabha on March 23 that a Bill to check the display of obscene cinema and other posters was under preparation. Dr. Keskar was replying to the debate on his Ministry's Budget demands totalling more than Rs. 13.48 crores. The Minister agreed that the section of the Press which incited communal passions should be curbed but added that the best check would be the unqualified disapproval by the public.

Basically, Government did not want to influence or dictate to newspapers or news agencies. Therefore, they could not take more than due interest in the re-organisation of Press Trust of India. There should be alternative news agencies to introduce an element of competition.

Government were carefully watching the situation born out of an increasing tendency for the growth of chains and monopolists in the newspaper industry. He did not accept the demand voiced by a Congress Member, that a Commission should be appointed to enquire into the conditions in which the Indian Press was working.

Referring to the projected expansion of All India Radio, Dr. Keskar said it was designed to ensure that programmes which were appreciated were heard in every nook and corner of the country. A large number of transmitters would be installed at various places where programmes were not adequately heard at present.

The Vividh Bharti would be made an All India alternative programme for people interested in lighter stuff. An attempt would be made to increase its duration and variety.

NATIONAL SCHOLARSHIP SCHEME

Replying to the debate on the demands for grants of the Education Ministry on March 20, the Union Minister for Education, Dr. Shrimali said that teachers being the pivot of the education system every effort would be made to improve their quality by increasing the facilities for their training and creating better conditions of service. In the course of the Third Plan Government proposed to establish an all India Scholarship scheme to help the children of primary and secondary school teachers. The triple benefit scheme for teachers under which they would be entitled to provident fund, pension and insurance would be introduced in all the States during the Third Plan period.

A comprehensive National Scholarship Scheme would be introduced in the Third Five Year Plan to give adequate assistance to students of merit to pursue higher education. The selection of students would be made at the conclusion of the Matriculation stage. The scheme also envisaged scholarships to students with promising merit in the pre-Matriculation stages also

An autonomous board at the national level would be set up to administer the scheme.

To provide opportunities to needy students to earn while learning, the Minister said it had been decided to set up industrial estates in five Universities—Osmania, Jadhavpur, Rajasthan, Baroda and Allahabad. Industrial estates were also being attached to rural Institutes.

KALIDAS AKADAMI

Replying to the debate on the budget demands of the Ministry of National Resources and Scientific Research, totalling over Rs. 26 crores, Shri Humayun Kabir made two announcements. He said a National Science Museum was proposed to be set up in Delhi during the Third Plan period and promised substantial grants for a Kalidas Akadami at Ujjain if an application was made through the State Government.

Speaking about technical education he said the admissions would rise to 20,000 a year at the end of the Third Plan and he did not think a larger number would be required for the next ten years. To remove difficulties about practical training, legislation on national apprenticeship was proposed.

PRIME MINISTER REPORTS ON COMMONWEALTH CONFERENCE

Reporting to the Lok Sabha on the Commonwealth Conference in London, the Prime Minister said on March 27, the decision on South Africa was a unique one and it would have far reaching consequences. The Commonwealth had been strengthened by South Africa's withdrawal and the question of racial equality had been put at the highest level in the international context.

About the Congo, Shri Nehru said he hoped that the great powers who are the allies of Belgium would bring adequate pressure on her to withdraw her men from the Congo. He said Belgian presence was the crux of the Congo problem and India did not want war-like measures to push them out.

As for the Indian combat troops in the Congo, Shri Nehru said they would do whatever they were told by the U.N. to do within the ambit of their work. If it was necessary for them to go to Katanga, Mr. Tshombe's threats would not deter them.

On Loas, the Prime Minister said he

hoped that the efforts now being made to find a solution would meet with success and there would be an early ceasefire.

Emphasising the Soviet Union and the new administration in the United States attached great importance to this problem and he hoped the two powers would come together.

FACTS AND FIGURES

Fertilizers Production: This year's production of nitrogenous fertilizers is likely to be 4.63 lakh tons. This, together with an import of 9 lakh tons, as well as other varieties of fertilizers produced within the country, would be able to meet about 66 per cent of our requirements. By the end of the Third Plan it is planned to produce one million tons of nitrogenous fertilizers and 5 million tons of other Varieties.

State Owned Oil Refineries: The Government owned refinery at Nunmati (Gauhati) in Assam with a capacity of 7.5 lakh tons, will be in full production by the end of this year. In the Barauni refinery, units for producing the first million tons are likely to be operated by about October next year and for another million tons by March 1963. The entire refinery is expected to be in full-scale production by December 1963.

National Highways: All the missing road links in the existing National Highway system, except the 3 new National highways, are expected to be constructed by the end of the Third Five Year Plan. The 3 new Highways, the Agra-Jaipur-Bikaner, Jabalpur-Bhopal-Bilora and Sholapur, Chitradurga, were recently added to the National Highway system.

Erections of Power Plants: An organisation is to be set up in the Power Wing of the Central Water and Power Commission for taking up the specialised work of engineering, design, procurement and installation of large thermal and hydro power stations in the country. It is expected that the organisation would be well established by 1964, when it would be in a position to take up actual work of erection. The total expenditure on this during the next 3 years is likely to be Rs. 50 lakhs. The organisation would save considerable foreign exchange and reduce dependence on foreign consultants for the erection of plants.

Trainees For Watch Factories: The first batch of 47 candidates to be trained as technical for the proposed watch factory of the Hindustan Machine Tools is being sent to Japan shortly. The second batch of 37 candidates would be on training in India before they are deputed to Japan.

Hydel Projects in Hilly Areas: Government are considering a proposal to install small hydro-electric sets for electrification of remote places in hilly areas. Reconnaissance surveys of potential sites for the establishment of small hydro-electric units have been carried out in Tripura, Manipur, Himachal Pradesh and in Jammu and Kashmir. Possibilities of micro hydel generation also exist in Assam, Madhya Pradesh, Mysore, Orissa, Punjab, Uttar Pradesh and West Bengal. These State Governments have been advised to carry out the necessary investigations.

Expansion of Steel Plants: Detailed project reports for the expansion of the three public sector steel plants are under preparation. The capacity of the Bhilai Plant is to be expanded to 2.5 million tons, the Rourkela Plant to 1.8 million and the Durgapur Plant to 1.6 million tons.

Coal Supply: The Government is considering the possibility of transporting one million tons of coal from Calcutta by ship to South and West India. After July it would be possible to move 2,100 wagons a day above Moghulsarai instead of 1,900 at present. This would help ease the coal supply position in Uttar Pradesh, Punjab and Rajasthan.

Irrigation Potential: The total irrigation potential created by the major and medium irrigation projects up to the end of 1959-60 was 115 million acres. It is estimated that during 1960-61 an additional potential of about 1.7 million acres would be created by the major and medium irrigation projects.

Health Centres: By the end of this month about 2,900 primary health centres are likely to be opened in the country. The target for the Second Plan was 3,000 centres.

Educational Assistance: Government has accepted in principle the recommendation that a scheme of educational assistance similar to the one in operation in the railways be introduced for Central Government employees whose salary does not

exceed Rs. 300 per month. This was to enable them to send their children to boarding schools of their choice when suitable schooling facilities did not exist at the stations where they were posted.

Machine Tools: The Hindustan Machine Tools, Bangalore, have offered to set up two additional factories. One of these medium type factories is proposed to be set up in Punjab. A machine tools factory is to be set up in Hyderabad. For the purpose, the Praga Tools Corporation will be expanded in collaboration with Poland.

Mechanical Toys: Mechanical toys of various types are being produced at the Kalyani Industrial Estate. The production started in March last.

Motor Cycles and Scooters: The question of licensing some more units for the manufacture of motor cycles and scooters is at present under Government's consideration. As against the target of 11,000 scooters and motor cycles to be manufactured during the Second Plan more than 17,000 had actually been produced. It was estimated that demand for these would increase to about 60,000 by the end of the Third Plan.

Advice on Steel Plants: Government have asked the Soviet Union for the services of an expert to suggest improvements in the working of the Bhilai Steel Plant. A French team had visited the Rourkela Plant and recommended the setting up of a production planning department and an Organisation department at the plant. Similarly, a British team have made recommendations about stores, organisation, coal stocks and documentation at the Durgapur plant. These recommendations were being progressively implemented by the projects.

Alloy Requirements: The total alloy requirements in the country is likely to be about 2 lakh tons a year by the end of the Third Plan. The Central Alloy Steels Plant was likely to contribute about 50,000 tons, and the Ordnance factories about thousand tons. The question of licensing the additional requirement was now under consideration.

Any couple with five or six kids is happier than a couple with six million dollars. They don't keep straining for more.

--Pageant, USA



TENNIS

Eastern Zone Davis Cup

India finished with a 5-0 victory over Thailand in the semi-final of the East Zone Davis Cup Competition played at Lucknow on April 1, 2, and 3, and qualified to meet the winners of the Japan-Philippines tie in the final.

The home team, which had gained a 3-0 winning lead on the second day claimed the remaining two singles.

India-Australia Test Matches

First Test: The first unofficial Tennis Test between Australia and India came to a most disappointing end at Calcutta on April 10, when the deciding match between Ramanathan Krishnan and Bob Hewitt was abandoned in the third set owing to failing light. The scores at that stage (Hewitt first) were 6-4, 6-4, 9-9.

Earlier, Jaideep Mukherjee exceeded all expectations by beating Fred Stolle, 4-6, 6-3, 7-5, 6-1, to level the scores, the Australians having taken a 2-1 lead the previous day.

Second Test: It was Ken Fletcher's distinction to steer Australia to a well-merited 3-2 victory over India in the second Tennis Test at the Roshanara Club courts New Delhi on April 13.

Fletcher pulled it off when he outscored and outvolleyed Premjit Lal 7-5, 6-4, 6-1 in just over an hour to clinch the winning 3-1 lead for his country. Krishnan, who appeared to run away with the match leading by two sets to nil, was extended to four sets by Hewitt, the final scores being 6-1, 6-1, 5-7, 7-5.

BADMINTON

India-Thailand Test Matches

First Test: Thailand won the first badminton Test against India, annexing seven matches out of eight played in the two-day contest at Hyderabad on April 3 and 4.

The results of the matches were:

Singles (Thai names first): Chavalarat lost to O. Rincon 15-11, 13-15, 3-15; Samsook beat Dipu Ghosh 13-18, 15-11, 18-14; Chen-narong beat Narinder Sayal 15-5, 18-15.

Doubles: N. Arong and Raphi beat Deoras and Shaikh 15-11, 15-11.

Second Test: For the first time in the history of sports in this country an international fixture fell through when Thailand refused to complete their second day's programme of the second badminton Test against India at New Delhi on April 8.

Thai players declined to play because of the 'unsatisfactory nature of the court'.

TABLE-TENNIS

World Table Tennis Championships

China won the Swaythling Cup men's team event in the World Table Tennis Championships on April 9 at Peking, beating Japan in the final by five games to three. Japan were the holders for the last five successive championships.

Japan, after a hard-fought five-match final, won the Corbillon Cup by beating China 3-2. Japan, fielding a two-girl team of Kimiyo Matsuzaki and Kazuko Itoh trailed 1-2 after losing the doubles against Sun Me-Ying and Chiu Chung-Hui, but fought back magnificently to win the two remaining singles.

Chuang Tse-tung is World T-T Champion

Chuang Tse-tung, stocky 19-year-old Shanghai student won the men's singles title in the World Table Tennis Championships at Peking on April 14, defeating his compatriot, Li Fu-jung, in four games in the final.

Chuang beat his 18-year-old unseeded rival 21-15, 21-15, 19-21, 21-17.

Chuang, seeded seventh, fought an all-out attacking battle with Li. Both played in the same style—powerful forehand smashes and fast half-volleys. The teenage Chinese made it one of the fastest men's singles final in the history of the championships.

Chuang is a successor to his compatriot, Jung Kuo-tuan, who won the title in Dortmund in 1959. Jung was defeated in the fourth round by 15-year-old Brazilian prodigy, Ubiracy Da Costa.

Chiu Chung-hui, 26-year-old Peking physical culture student, won the women's

30. The Nepalese Government gave clearance to Sir Edmund Hillary's Makalu expedition.

Gen. Manghistu Newye, former Commander of the Ethiopian Imperial Guard, was hanged for his part in the abortive coup against Emperor Haile Selassie in December last.

It was learnt that the deposed Premier, Mr. B.P. Koirala of Nepal went on hunger strike on March 25 demanding that he be either released or tried on the charges levelled against him.

31. It was reported to-day that the President Albert Kalonji of the "autonomous" mining state has formed a new government, with himself as Premier.

APRIL

1. It was announced that the import policy for April-September 1961 seeks to sustain industrial activity within the limitations of foreign exchange available—increasing emphasis being put on export promotion licensing.

A university of Melbourne balloon photographic plates to record the power of cosmic rays made the world's longest research balloon flight, Prof. V.D. Hooper, Head of the Physics department said to-day.

2. Katanga's armed forces manned machine guns and blocked air strips at Elizabethville against the arrival of Indian troops of the U.N. force which were reportedly scheduled to reach Elizabethville early today.

President Tshombe in a cable to President Kasavubu rejected the decision taken at the Tananarive conference to form a confederation of all Congolese States.

Master Tara Singh, President of the Akali Dal, said at Amritsar that he would stake his life for the creation of a Punjabi Suba.

3. Mr. Balraj Madhok (Jan Sangh) was to-day elected to the Lok Sabha in the by-election (to the seat vacated by Sucheta Kripalani) from New Delhi.

Mr. B.P. Koirala deposed Prime Minister of Nepal broke his fast, in jail, it was announced to-day.

Communist guerillas launched widespread attacks against South Vietnam forces in what the Government believed to be an attempt to upset the presidential elections at Saigon on April 9.

The U.S. and Indian Governments signed six project agreements allocating Rs. 46 crores out of the loan portion of P.L. 480 Counterpart Funds available to India.

The Strength of Bihar Cabinet was raised.

4. India, Malaya and Ceylon submitted to the U.N. Special Political Committee a draft resolution calling on all nations to take individual and collective measures to bring South Africa to abandon its apartheid policy.

Thousands of armed Africans marched on Elizabethville airport and besieged the Swedish Contingent of U.N. troops at the airport.

The proclamation of a new Congolese State named Kwango was reported to-day by the Congolese news agency.

5. Belgium notified the U.N. that it was ready to comply with the Security Council resolution of Feb. 21 that all Belgian personnel be withdrawn from the Congo. The Belgian decision was conveyed to the U.N. Secretary-General Hammarskjöld on April 3.

5. It was reported that Bhutan had decided to seal its border with Tibet in order to prevent entry of Chinese agents and refugees fleeing the Communists.

Mr. Nehru inaugurated the Rs. 93-crore Narmada River Valley Project by pressing a button to blast a part of the nearby mountain to start work on its first stage.

6. The Union Government has decided to amalgamate the Eastern and the Western Shipping Corporation, which are both in the Public Sector, to form a single Shipping Corporation.

The Union Government decided to proceed with the construction of the Faraka Barrage despite protest from Pakistan.

It was reported that the Soviet Scientists had discovered new range of mountains in the five-mile deep Java trench in the Indian Ocean.

The Massachusetts Institute of Technology said that a space probe sent up from Cape Canaveral, Florida, disclosed the existence of a solar wind sweeping into space from the sun at a speed of millions of miles an hour.

7. Proclamation was made of another Congolese state named "Unity of Kasai"

with Mr. Gregoire Kamanga as Head of the State.

It was reported that nearly 3,000 African refugees had fled to Matadi, Congo from Angola due to Portuguese massacres and oppression.

8. Rescue Ships and aircraft combed the Persian Gulf for 49 people missing from Bombay-bound British Cargo liner "Dara" which was abandoned in flames this morning. Casualties feared to be as high as 212.

It was announced that the Ethiopian U.N. troops disarmed Katanga forces and took them prisoner to prevent clashes with rebel Baluba tribesman in Kabolo, in Northern Katanga.

The first India made jet engine designed and developed by the Gas Turbine Research centre at the I.A.F. Maintenance Depot, Kanpur, was inaugurated by the Defence Minister, Mr. V. K. Krishna Menon.

9. It was announced that the Space cabin named Discoverer XXIII launcher at California had been placed in orbit around the earth.

About 100 Africans were arrested in Luanda in Angola when they were preparing to stage a demonstration.

It was reported that for Southern Rhodesia pass legislation had been almost entirely scrapped. The new legislation which came into force on April 7 enables Africans to move freely about the country.

10. King Mahendra liquidated all the 15 vassal states within Nepal and stripped their Chiefs, called Rajas, of all powers in respect of revenue collection and judiciary; however, retaining their present title of Raja and receive privy purses.

11. Nigeria formerly banned trade with South Africa; the ban was imposed to demonstrate Nigeria's disapproval of apartheid.

President de Gaulle said that France would stop all aid to Algeria if the people there voted for a break with France.

The Development Loan Fund announced the signing of a ten million dollar loan to an India Government Corporation for procuring equipment to be made available to small business of India on a rental-purchase plan.

12. The Soviet Union launched the first man (Yuri Alekseyevich Gagarin, 27)

into space and brought him back alive and well. He was in space in a four-and a half ton ship for 108 minutes.

Khan Abdul Ghaffar Khan, popularly known as the Frontier Gandhi, was arrested in his village in Pakistan.

An agreement was signed between the Government of India and Bauchet, a French concern, for the Construction of a plant at Ootacamund, for the manufacture of film stock and photographic paper at a cost of 80,000,000 new francs (about Rs. 7.6 crores); under the agreement the company would train Indian technicians at Rueil, the Headquarters of the Firm.

APPOINTMENTS, AWARDS Etc.

(Continued from page 485)

arrived in New Delhi on March 30 from Bangkok for talks with Mr. Nehru on the international situation.

M. Couve de Murville, the French Foreign Minister, arrived in New Delhi on April 2, from Bangkok on a two-day stay in the city.

A five-member delegation of the Communist Party of the Soviet Union arrived in New Delhi from Moscow on April 5.

The U.S. Ambassador-designate, Prof. J. K. Galbraith, arrived in New Delhi on April 9.

OBITUARY

Amjed Hyderabad (82) noted Urdu Sufi Poet, died in Hyderabad on March 30 after a brief illness.

Mr. Wallingford Reiffer (75) one of the most respected contemporary composers in the U.S. died in New York on April 2.

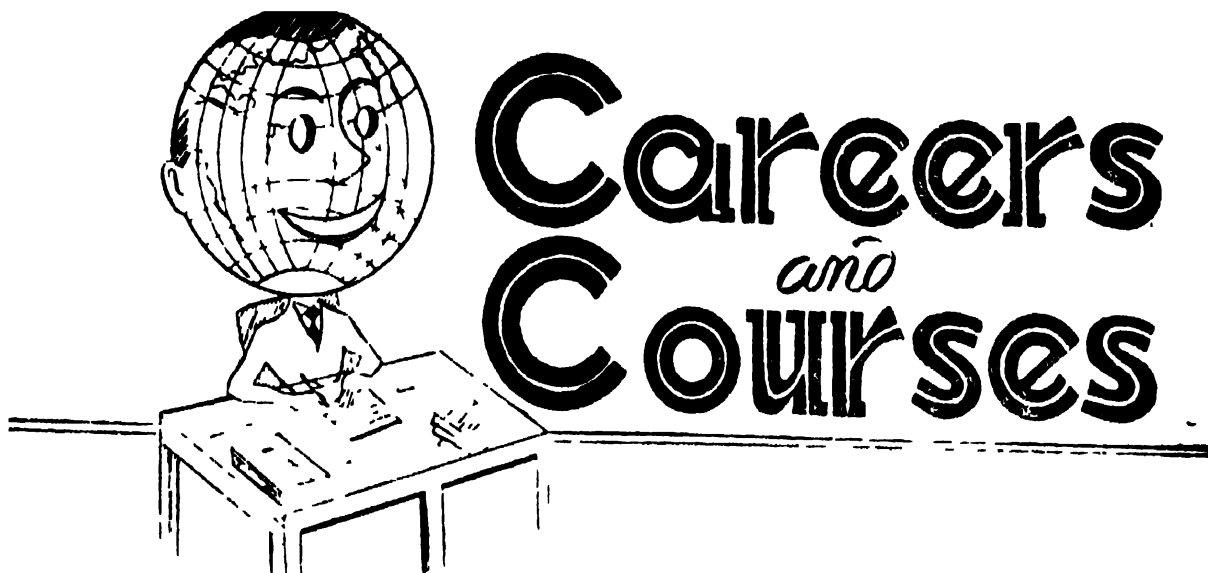
Sculptor Paul Landowski (85) former director of the Paris Beaux Arts Academy and creator of many Persian landmarks, died after heart attack in Paris on March 31.

Dr. M. V. Govindaswamy (52) an internationally reputed psychiatrist and surgeon died at Bangalore on April 7.

Prof. Jule Bordet (91), who won a Nobel Prize for his contribution to Medical science, died in Brussels.

Ex-King Zog (65) of Albania died in Hospital in the Paris suburb of Suresnes on April 9.

Dr. Joseph S. Butts (57) of the U.S., F.A.O. Nutrition Adviser for Liaison with the UNICEF, passed away in Delhi on April 9 after a short illness.



EDITORIAL

INEVITABILITY OF WAR

When atomic bombs dropped over Hiroshima and Nagasaki gave a finishing touch to the World War II, it was hoped that the mankind would never indulge in another orgy of destruction and devastation. The havoc caused by the atomic bombs created so great awe and terror in the human minds that men began to devise other peaceful means to solve their mutual conflicts. With this motive in view the foundation of the United Nations was laid. It was thought that mankind had reached an ultimate stage in the development of weapons of destruction and no nation would dare to go to war for the fear of being annihilated by the nuclear weapons. War was renounced by everyone as a means of settling disputes. Since the inauguration of the United Nations efforts had been made to remove the causes of war between the member-nations and many disputes had been referred to this institution for settlement by peaceful negotiations. But the U.N., despite its best and sincere efforts for settlement of world problems, has been unsuccessful to bring peace in the world because of the incessant cold war between two big Powers, America and Russia. Many a dispute which easily would have been settled in an amicable way and in a peaceful and cordial atmosphere, has been made more complicated by the exponents of the cold war. The result is that peace has become as illusive as will-o-the-wisp and mankind's dream of an era of peace and plenty, of coexistence and goodwill, is still very far from being realised. Due to the rivalry of Big Powers the world

situation has become so dangerous that there is every possibility of the cold war becoming a hot war at any time.

The world today is mainly divided into two Power-blocs, the Communist and the Democratic. The Communist bloc, comprising one-third of the globe today, is led by Russia. The Democratic or the Free World bloc is led by the United States. Russia is doing its best to spread Communism throughout the world by any means short of a shooting war, and America is putting its every effort to contain the spread of Communism even at the risk of a war. The cold war between the two big world Powers is keeping the world tension alive and there is no likelihood of any side yielding to the other because of a more or less exact military balance between the two.

The greatest threat to world peace is the ideology of Communism. There is a quasi-religious enthusiasm among the Communists to communise the whole world. No holds are barred, no subterfuge is inhibited in their "war against imperialism". They have taken upon themselves the task of "liberating" all the workers and peasants of the world. They are most vociferous in their professions of peaceful coexistence but they are always ready to support the "just wars of the people" for their liberation. For them 'people' are those persons who are Communists or their fellow-travelers, all others are "enemies of the people". To them a non Communist or neutral government is imperialistic or colonialist. They organise Communist parties in neutral

countries and poison the minds of communist members to such an extent that they become traitors to their own national interests. The Communist parties, which are more or less in existence in all countries, are ready to fight the battles of Communist world strategy. They act as spies and saboteurs even against their own motherlands. Once a country becomes Communist, all individual freedom vanishes.

All freedom-loving countries are struck with the terror of growth of Communism and consider it a potential threat to their own freedom. They naturally seek the help of America, the greatest bulwark of freedom and democracy, and many of them have allowed her to establish military bases on their soil. The result is that the Communist countries are surrounded by a ring of military bases. This is another cause of perpetual tension between the two Power blocs.

The fanaticism of Russia to bring the whole world in the fold of Communism is bedevilling the world situation and making the chances of world peace recede farther away. "We are for coexistence, but we are also for the growth of Communism", Mr. Khrushchev once said. The Communists talk of coexistence, but what they are after is simply the opportunity to continue, without interference, their ideological warfare and conquests from within the countries with which they "coexist". The manifesto issued by the International Communist Conference, held in Moscow in December 1960, stated: "Peaceful coexistence of countries with different social systems is the alternative to war today. . . peaceful coexistence does not imply renunciation of the class struggle, as the revisionists claim. . . In conditions of peaceful coexistence, favourable opportunities are provided for the development of the class struggle in the capitalist countries and the national liberation movement of the peoples of colonial and dependent countries. . . It implies intensification of the struggle of the working class, of all the communist parties, for the triumph of socialist ideas." This is a categorical command to the Communist parties to wage an all-out campaign against the governments and people of their countries. The coexistence as elaborated, explained and advocated in the Moscow manifesto is not a goal of genuine peace; it is only a treacherous weapon to be employed for furthering the interests of the Soviet

imperialism in its drive for world conquest and Communist enslavement of the entire human race.

The United States being the biggest impediment to the spread of Communism, Russia leaves no opportunity to denounce America and her allies as "imperialists" and "enemies of peoples liberation from colonial rules". Russia has realised that the U.S. is the main obstacle, the real force in checking the Communist countries from making new conquests to bring free countries in their fold. The intense hatred of America and her policies is often given vent to in the speeches of Mr. Nikita Khrushchev and other Communist leaders. After the spy-plane U-2 incident in May 1960, a barrage of invectives against the U.S. and the American President was let loose by the Communists. Speaking at a banquet in Peking on June 4, 1960, Mr. Liu Shao-Chi, Chairman of the people's Republic of China, said that U.S. "Imperialism" was the most vicious enemy of the people throughout the world, and a struggle must be waged squarely against it. He added: "The peoples of the world must carry out persistent struggles against U.S. imperialism, strike incessant blows against its scheming activities to sabotage peace, and isolate it to the greatest possible extent. Only then we can force the U.S. imperialists to sit down and enter into negotiations with us. put off and even stop their plan for launching a new war, and provide a reliable guarantee for world peace." A Communist leader's talking about peace sounds like a devil quoting sacred scriptures. Communists have never renounced war unequivocally. On April 22, 1960, the Chinese Communist party called on the Socialist bloc to prepare for war and stated that the result of a nuclear conflict would be that "a civilisation thousands of times higher than the capitalist system and with a truly beautiful future" would be created on the debris of dead imperialism. The statement added: "Until the imperialist system and the exploiting classes come to an end, wars of one kind or another will always appear".

On May 11, 1960, Chinese Vice-Minister of Culture, Mr. Chien Chun Jui, sharply condemned "revisionists, pacifists and humanists" for describing "in dark colours all wars whether just or unjust in order to rally people against war and oppose just

vars." He declared that pacifists "point out the atrocities of war without distinction and stress destruction to individual happiness brought about by wars, thus spreading pessimistic ideas and terrorising the masses." He quoted Lenin as saying that socialists must not oppose all wars and that as long as classes have not disappeared and socialism has not been built, wars cannot be suppressed.

When the Communist bloc was attacking the United States after the spy-plane (U-2) incident, Mr. Chou En-lai added his own voice to the chorus of hatred. He dubbed the U.S. as "the number one enemy of peace", and said that U.S. aggression against any member of the Communist bloc was aggression against China and the entire bloc, which would deal "doubly powerful blows with an iron fist".

Last year an anti-American propaganda week (June 21-28) was 'celebrated' in Communist China with a violent attack on U.S. leaders and policies. A Trade Union leader, Mr. Liu Ning-Yi, termed President Eisenhower the "god of the plague" and said his Far Eastern visit was a "gangster trip". Special anti-American films and stage performances and exhibitions were put on during the week. Gen. Hsiao Hua, Deputy Chief of the Political Department of the Peoples Liberation Army called for the whole PLA to be ready for war—"to wipe out completely the imperialist system"—in other words, the conquest of the free world.

What hope of peace can there be in the world when a most powerful nation—Russia—and its satellites openly propagate war for achievement of their objective of subjugating the whole world. With an intense hatred for America, another equally powerful nation, and all other free-nations, can there be any hope for peaceful coexistence with the Communist bloc? Mr. Khrushchev said in October 1960 that "we recognise and support the just wars of people for their liberation". But how "just wars" or "wars of liberation" to be identified? Is Russia alone entitled to nominate a war as just, or of liberation? To Russia the Cuban Revolution was a just war, while the Hungarian Revolution of 1956 was a reactionary war. Any war against Western Power is a just war while any war against a Communist regime is unjust and imperialistic.

Since the end of World War II, the

Communists have been constantly creating trouble in some part of the world or the other. During the war Russia occupied major portion of Eastern Europe and installed Communist Governments in the occupied countries. In Europe, the Communist satellite countries are Germany (East), Poland, Romania, Bulgaria, Hungary, Czechoslovakia and Albania. There is no hope of these countries ever regaining freedom unless there is a major war and Russia is defeated, which is only wishful thinking. In 1949, Chiang Kai-Shek was ousted from China and the Communist Government was established there. This Communist Chinese Government, since its establishment, has not let its neighbours rest in peace. The Chinese fought in Korea (1950-53) and half of Korea is still under Communist regime. The Chinese sided with Viet-Minh forces in the Indochina war and helped in establishing a Communist State in North Vietnam. The Chinese occupied Tibet and ousted the Dalai Lama, the real ruler and head of that country. The Chinese grabbed almost 12,000 square miles of Indian territory and there is no hope that they would vacate the land by peaceful cajoling. The Chinese have been sporadically bombarding Quemoy and Matsu islands to pave way for conquering Formosa. Lately the Communists had fomented trouble in Laos and there is every likelihood of this small country being divided like Korea and Vietnam. The Communist guerillas are making constant raids into the northern border of South Vietnam with a view to topple the Government of President Ngo Dinh Diem.

In Africa, Congo has become the cockpit of cold war between the West and the Communists. Communism has achieved a foothold in the form of Castro's Government of Cuba in the Western hemisphere. Thus Communism is spreading day by day and there seems to be no way to check its expansion except by a full scale shooting war. The danger is real and, if unchecked, the Communist penetration in the whole of Asia, Africa and Latin America will gradually whittle away large chunks of the free world. To avoid the eventuality of a shooting war the Communists cry for outlawing war for all times. They simply want to gain time by talk of peace for their goal of world domination. But at the same time they are fully armed and prepared to meet the Western nations in

the arena of a hot war. The present arms race between the East and the West is pregnant with the possibility of a nuclear war being started at any time. The United States and Soviet Russia each possesses the power to devastate the other and to scar half of the rest of the world in the process.

Dr. Ralph Lapp, an American physicist, told a meeting of the American Association for the Advancement of Science, held in New York on December 28, 1960, that the United States had a nuclear stockpile equal to about 50,000 atom bombs of the type dropped on Hiroshima and in another three years it would have equivalent of an additional 30,000 such bombs. He added that most Soviet cities were "soft" targets and America's Atlas and Titan intercontinental missiles could carry nuclear warheads big enough to produce a blast effect of 100 pounds per square inch.

Mr. Khrushchev has declared several times that Russia has rockets with nuclear heads that can accurately hit the target thousands of miles away. Both sides, East and West, are fully prepared to meet any surprise attack and retaliate immediately. The stockpiling of atomic and hydrogen bombs can lead to an accidental war. Sir Charles Snow, a British scientist, has said: "Speaking with utmost responsibility I declare that within the next ten years at most, some of the bombs will work."

Mr. Khrushchev, in his speech at the U.N. Assembly in September 1960, said: "So much incendiary material has been accumulated that a single spark is sufficient for the world to be confronted with a catastrophe. The world has reached a point where a ridiculous mischance like a breakdown in the controls of a plane carrying an H-bomb or mental derangement of the pilot at the controls may make war a reality."

Mankind is sitting on the brink of a nuclear volcano which may erupt suddenly at any time. The U.S. and Russia are maintaining the "balance of terror" and it is said that as long as this balance is maintained, there is very little likelihood of a deliberately planned, coldly conceived nuclear attack by one party. It is also said that the nuclear bomb has proved a great "deterrent" to another big war, and that modern nuclear weapons have made war impossible. But this is a wishful thinking. Wars have never been fought on the basis of war weapons. Psycho-analytic writers

have always asserted that aggression is an innate drive in man, and therefore, that war is inevitable. History tells us that war, in one form or the other, has always plagued the world; large wars have occurred almost every twenty to forty years; smaller ones have been almost incessant, with only a few intermittent years of virtually complete peace. Primitive mankind fought battles with stone weapons. In the 'Iron Age' mankind developed lances and swords to fight. With the arrival of gunpowder in the arena of war, it was thought that man had reached the ultimate limit of the development of war-weapons. Then came rifles, muskets, guns which could shoot the enemy from a long distance. Machine gun was first used in the Franco-Prussian War. World War I provided the aeroplane, the tank and the poison gas. Even these lethal weapons could not prevent Germany to start World War II. It may be true that the A-and-H-bombs can create a greater havoc and ruin than any war weapons invented so far but it is also true that these nuclear bombs are being made and stocked to fight a war and not to be put in store-houses to frighten the enemy. There are many trouble spots in the world and war may be started accidentally anywhere. We can procrastinate a war but we cannot avoid it for long. It is better to be prepared for the eventuality of a nuclear war than to sit complacently thinking to the very last moment that it will not happen.

The question is how long the war can be avoided under the present circumstances. As long as there are two different ideologies—Communism and Democracy—and each trying to efface the other, there is no hope of any end of cold war. It is most unlikely that the Soviet leaders would give up their aim of world domination. Similarly the Western Governments are not prepared to give up their resistance to the Soviet policy of communization of the entire world. The danger of a shooting war starting at any time permanently hangs like the Democles sword over the head of the world. This danger can be avoided only when through evolution or revolution men come to power in the Soviet Union who genuinely renounce the Communist doctrine of totalitarian imperialism. Perhaps then the world will have a long spell of peace.

What Life Has Taught Me

By Sardar K. M. Panikkar

Only one lesson I may claim to have learnt from my life. It is that the success of all human endeavour depends to a considerable extent on chance. Undoubtedly no one can succeed in life without determination, industry and certain qualities of head and heart, but with all this a man may still achieve nothing worthwhile without opportunities coming in his way and circumstances being favourable to him.

I had but an indifferent education in India. Having failed more than once in my high school classes my guardians more or less in despair decided to send me to Oxford to acquire "a gentleman's education." I had only passed the matriculation examination of Madras and therefore it was not with any serious hope that I applied for admission at Christ Church. No one could have been more surprised than I was when that College admitted me in preference to others with brilliant university degrees. Later on I came to know that Dr. John Murray, the Junior Censor of that College in charge of admission, was gifted with what he called a fifth sense of judging from handwriting the character of young men and deciding their fitness for admission to the college on that basis. That is how I was admitted to Oxford.

That I graduated with first class honours in modern history may no doubt be credited to my industry. But even this had an accidental motivation. Most of the Indians at Oxford in my time being graduates with honours degrees from India were inclined to look upon a raw matriculate with a certain amount of patronage and to emphasise the inadequacies of his background. Resenting this attitude I challenged one of the most aggressive of them and said that whatever the handicap I started with I would do better than him in the final examinations.

What determined my career in India was also a fortuitous circumstance like this. In those days there was a magazine published from Madras under the editorship of a gentleman by the name of T. K. Swaminathan which announced a prize of the modest sum of Rs. 100 donated by Sir C. P. Ramaswami Aiyar for an essay on the position of Indians in British Colonies. I took part in that competition and the donor, who, I understood, was himself the judge awarded the prize to me. It was small

enough achievement. But it had strange consequences. Sir Swaminathan had the essay published with an introduction by Sir C. P. Ramaswami Aiyar under the title of: "The problems of Greater India." That little book by an unknown undergraduate at Oxford was reviewed in a lengthy essay by Sir Ronald Wilson, Baronet, in one of the London reviews, which led to my being invited to address the East India Association, then the citadel of retired Anglo-Indian orthodoxy. This lecture which was on the problems of Indian education not only attracted wide attention, but earned the distinction of an editorial in the **Times Education Supplement**. It is this article that brought my name to the notice of Nawab Ross Masood, who on the strength of my first class and the favourable comments in the **Times** editorial recommended me for appointment to Aligarh.

I was at Aligarh only for three years. The non-cooperation movement caught me in its whirlpool and from 1922 to 1925 I was associated with the political struggle. I had a singular experience at this time which is worth recording. A palmist whose professional name was "Ariel" called on me at the Swarajya Office and wanted me to give him a print of my palm. I did so with reluctance. He took it away and ten days later I received a type-written document which stated that I would give up my political activities in a year, and will join the service of a State in North India in December 1927. I took no notice of it at the time but strange to say his prognostication came out literally true.

In the year 1925 I was again in Europe living mainly as a journalist but also completing my terms at the Middle Temple. I had developed a general interest in the history of the Portuguese in India and in the winter of 1925 I visited Lisbon to work in the national archives there. There standing on the beach at Belem from where Vasco da Gama sailed to India the idea came to me of writing a history of European dominance in Asia. Then it was no more than a vague ambition but the idea lay dormant in my mind for over 27 years to find realisation in 1952. I began to gather together in one volume the fruits of a lifetime study entitled "Asia and Western Dominance". This was only one of the many instances which reinforced my con-

viction that an idea which is once firmly planted in mind grows and bears fruit in time.

Another instance which was no less striking and had even a greater influence on my life related to my interest in Indian States. In the January issue of 1919 of the **Modern Review**, I published a lengthy article entitled "The Future of the Indian States." It was written as an essay while I was at Oxford. At that time I had no intention of writing a book on the topic, but six years later, when I was in Delhi editing the **Hindustan Times**, I began in my leisure study of the subject the results of which were embodied in a volume entitled "The Relations of the Government of India with the Indian States." As in the earlier case of "The Problem of Greater India", it was the publication of this work which changed the course of my life. A few days after the book came out, with an introduction by Lord Olivier, a former Secretary of State for India, I was accosted in front of the Ritz Hotel, London, by an impressive-looking personage whom I did not know. He asked me if I was not so and so and on my replying in the affirmative he said rather abruptly: "I am Col. Haksar; I have been trying to get into contact with you for the last few days. Would you come up to my room? I want to have a talk with you."

I agreed to go up with him and in his suite in the Ritz Hotel he told me that he had negotiated with the India Office the appointment of the Butler Committee to go into the relations of the States with the Government of India and how after having read my book he was anxious that I should join with him in preparing the case of the Princes. That is how I embarked on my career in the service of Indian States which was to be my major field work for over 20 years (1928-1948).

The Ministers and Dewans of leading States in those far off days were either men with local influence, distinguished politicians from British India or retired officials who had the backing of the Political Department. Coming from far off Travancore without either a public career or political influence, it was always a surprise to me, no less than to others, how I maintained my position practically to the last days of the existence of these States. Apart from steady, honest work there were two things which helped me. I was lucky

enough to earn and maintain the confidence and friendship of some of the most distinguished men I had to work with, most notable among them being Col. Kailas Haksar who was originally responsible for my appointment to a State and Sri V. T. Krishnamachari whose career in the States synchronised with mine. Others whose help, advice and support were available to me, though to a lesser extent, were Sri Manubhai Mehta and Sir Maurice Gwyer, a former Chief Justice of India's Supreme Court. The second was a line of conduct. It was a steady refusal to concern myself with intrigues and palace affairs or to be a courtier—a policy which the rulers whom I served came in time to appreciate.

Two lessons I learnt during my service in the States as being essential to success in any sphere: loyalty to friends and loyalty to certain basic ideas. I could not have continued for twenty years in the States without a strict adherence to these. The idea to which I was committed from the time of the first article I wrote in the **Modern Review** in 1919, and which I elaborated in my book in 1927, was that the future of States lay in association with the rest of India, and that any policy which widened the gulf between what had come then to be known as Indian India and British India would be disastrous to both but mainly to the States. When I joined the service of the Chamber of Princes there was a dominant school of Princes and Ministers who, influenced by Sir Leslie Scott, Rushbrook Williams and others, believed seriously that the future of the States lay in separating themselves from the rest of India. I made no secret of my determined opposition to this view and though some of the Princes I was most intimately associated with, like Maharaja Ganga Singh of Bikaner, disapproved of my views, such disapproval did not come in the way of their giving me their confidence. The steadiness with which I held this view that the Princes and the people of the States can fulfil their destiny only in a free India enabled me in 1946-47 to play a part in bringing about the integration of the States.

For most of the time between 1948 and 1958 I was posted abroad as Ambassador first to China, then to Egypt and lastly to France. All these three countries witnessed during the period of my mission basic revolutionary changes. Judged by any standard, the Revolution in China was a

major event of world significance. The period of my stay in Egypt also synchronised with another revolution, which, though not of the same world significance, was important as affecting areas of vital strategic importance. Nor was my stay in France devoid of revolutionary interest. The collapse of the Fourth Republic and the return of de Gaulle to power after wandering in the wilderness for over 10 years, had a dramatic quality which could not be overlooked and had far reaching effect on European politics. There is one lesson which I learnt from my diplomatic experiment in these three totally different circumstances. An Ambassador earns respect and can succeed in his work only if he holds steadily and unswervingly to the point of view of his country, however unpopular it may be, to the Government to which he is accredited. Political integrity is the first thing required in any Ambassador and whatever success I have had as a diplomat was due mainly to my determination at all times to uphold the Government of India's point of view in my discussions with foreign Governments whatever might be the opinions I might myself pass on to my Government. When you are in a representative capacity no other course is open to you.

The work of the States Reorganisation Commission (SRC) also had its lesson for me. It enabled me to travel all over India and see at first hand the problems that the State Governments were faced with. Every State had its own claims which it put forward with an almost imperialistic desire for additional territory. It was strange to see national leaders, even those who had suffered and sacrificed for the freedom of India, quarrelling among themselves about a village here and an **ilaga** there and prepared to go the extent of offering civil disobedience to enforce their claims. The lesson I drew from it was that with the generosity of people in times of peace narrow parochial interests count for much more than broad national interests.

Early in life I had come to the conclusion that it is only through work and through the internal discipline which creative activity develops, that a man can find contentment and happiness. I had an inherited taste for literature and from the time I was at school I had begun to write poetry of a kind. Strangely enough it was at Oxford that I took actively to the culti-

vation of Malayalam literature and nothing has given me that sense of contentment in times of difficulty and crisis as the writing of poetry. There was never a period in my active life when I did not devote at least an hour a day to literary pursuits in Malayalam. I found in translations a discipline of mind which kept away worries and overcame troubles. During a period of the greatest difficulty in Nanking, when the Chinese communists had withdrawn even the privilege of free movement from diplomats and we were more or less placed under domiciliary arrest, what sustained me was this discipline of translating classics. It is at that time I translated **Kumara Sambhava** into Malayalam verse and also undertook a rendering of the famous Chinese drama 'The Western Chamber' from its English translation.

Life, after all, is a continuous interpretation of past experience but all experience teaches that human effort however carefully planned and wisely guided, is only a part of what contributes to the result. The element of luck, fortune, chance, whatever you may call it, is there and cannot be overlooked. The most powerful brain may be laid low by the bursting of a blood vessel. The greatest of all lessons, therefore, is the lesson of humility which human beings in their belief in self-sufficiency are apt to forget in times of success.

(Courtesy: "Bhavan's Journal")

Some people worry about nothing—especially when it's in the bank.

—**Pensacola Gosport, USA**

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It takes only a few drinks to make men see double and feel single.

—**Spotlight, S. Africa**

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Boys like romantic tales; but babies like realistic tales because they find them romantic.—**G.K. Chesterton**

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Any man, who will look into his heart and honestly write what he sees there, will find plenty of readers.—**Edgar W. Howe**

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Realism will at length be found to surpass imagination, and to suit and savor all literature.—**Mary Baker Eddy**

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Literature is a great staff, but a sorry crutch.—**Walter Scott**

Man At The Crossroads

By Dr. S. Vahiduddin

Man is the most paradoxical of all living beings. His situation remains always ambiguous. In the march of life he is always faced with alternatives. It is nothing to wonder at if the development of his situation should reflect the essential bipolarity of his existence and a constant swing between extremes. In the region of his highest activity, in his achievements in science and technology, in the creativity of his artistic imagination, in his persistent quest on the path of philosophical speculation, we find him involved in situations which bristle with conflicting possibilities. Be it in the individual growth of his person or in the development of his civilization, he has to pass through many conflicts and live through many crises. Unlike sub-human levels of life his path is not fixed once for all by the species to which he belongs. This is the reason why philosophical anthropologists like Arnold Gehlen call him an incomplete animal. From the outset he is exposed to a life of perils and risks, and it is his destiny to work out his own future without full guidance from nature. The civilization that is his creation is not the simple recurrence of an inherited pattern but the birth of a new system. In the course of his earthly life he is dovetailed with two different orders, Nature and History. Nature has given us birth but history inculcates culture in us and awakens in the human mind a sense of values. Traditions and language forge the individual personality in a super-personal mould.

But the historicity of man's existence creates its own problems. A given period of history allows room only for a limited perspective, and it is necessary to take cognizance of historical limitation. Every poet, said Schiller, is necessarily a child of his times, and woe betide him if he becomes a spoilt child!

The momentous discoveries in physical sciences and the tremendous improvement in economic conditions have made man oblivious of values other than the vital. Even religion has converted itself into a mass concern and has lost all contact with its origins in the experience of ultimateness. As a result it has become tremendously vocal and unauthentic. Silence, which was once held to be the crux of the religious situation, has no more any relevance in the religious context. Utility pub-

licity and success are the values which now set our axiological perspective. Where is the passion for beauty and sublimity which was once considered to be the highest grace of the human situation? The feeling for the transcendent which once distinguished the intimacy of lonely moments in human experience has been lost in the impetuous haste of the modern world. Once in constant communion with Nature at all its levels man has now been slowly robbed of all his contacts with animal life and rural atmosphere. Torn by tension in the privacy of his individual life and in national and international relationships, he is striving hard to gain tranquility at home and peace outside. He has indeed become the victim of his own ingenuity.

What is now required is to save man from himself. And how can the peace for which he is clamouring be assured unless he comes into his own and becomes what he is? This is the mission which Goethe assigned to man. As it is at present, industrialization has benumbed human affection and science has made man clever without making him wise. Where once there was a moment of love even in business, there is now an element of business even in love. The consequence is the prevalence of suspicion and hatred on every plane of human relationships. Scientific advancement has led to arrogance and has provoked insatiable lust for destruction. Hypocrisy on the international plane is the new virtue that we have acquired. We freely practise what we condemn in others. We show our concern for peace only in preparing for war. Secret diplomacy, which Kant considered a potential source of war, is still the reigning principle of inter-state relationships. The espionage system is not confined to any one country. The choice to be is not given us but may be decided by a few men in power. Let the young men and women of the world realize that existence is interdependence and must needs be co-existence. But it is of no avail for us to consider one another's existence a necessary evil and force ourselves into a state of tolerance by an unsteady act of will. What is required is not the recognition of difference but the appreciation of the truth that every culture, past or present, like the individual, is irreplaceable and unique. Man's potential

ities for good and evil are not exhausted in any one culture or epoch but can unfold themselves in any part of the world or in any period of the historical process.

Such a universality of vision alone can make us see the limitations of every human achievement and can work for reconciliation between conflicting ideologies. To Hegel goes the credit of having stressed the antithetic structure of reality. Sometimes the conflict may be born of difference and may not develop into any serious hostility. But even the difference demands recognition and may constitute a challenge to our capacity for adjustment. Even when the conflict is not merely the outcome of difference but issues forth from real antagonism, the possibility of reconciliation is not ruled out. This is indeed the assumption of the Hegelian dialectic, that reconciliation is final and ultimate and the opposition is transitional. But unfortunately in the reality which we experience reconciliation is at the most a desideratum. And this is really the tragic moment of the human adventure which we call history. We are humanly concerned not to bewail the scheme of things but to recognize the immense potentialities for good immanent in the divine order and, by our own limited initiative and striving, force the historical process to yield new surprises in the realm of knowledge and human relationships. There is indeed no denying the fact that man has arrived today at a critical juncture of his history. In weak and fatal moments he may let loose a catastrophe which will mean the end of his culture. With the extinction of his culture man severs his links with history and sinks to the level of barbarity and primitivity.

Happily there are some hopeful signs. Out of the ruins of human misdeeds and from the anguish of human suffering the vision of a new world is slowly emerging. Against the division of race and language and the dissensions of beliefs and ideas a new generation is asserting itself and forcing its way.

How unfortunate that whereas in the war-ridden West there is a universal trend in every group towards integration with a larger whole and gaining strength and spiritual enrichment by a process of unification, we in Asia and Africa should be moving on a downward course! Regional rivalries and parochial affiliations have taken roots in our native soil and have

made us blind to the unity underlying all creation. Doubtless, not only the region where we have first seen the light of the day and grown in the midst of our dear ones but also the language in which the heritage of our forefathers is enshrined is worthy enough to make every sacrifice worthwhile. But let not our attachments to our immediate surroundings sever our bonds with the great country with which our joys and sufferings are indissolubly linked and let not our devotion to our region and group make us ignore the imperatives which are applicable to us as human beings no matter who we are and where we are.

It is high time also for us to see that the East and the West have lost all their exclusiveness and the twain who could never meet have become the twins one cannot part. Let us, then, wake up to the vision of new men who will be equally at home in the East and the West and who will be determined not only to live with one another but for one another and hold themselves responsible for the weal and woe of all. Only then can the ephemeral existence of Man on earth assume perennial significance and the shadows of an imminent termination of his earthly career recede. (Courtesy. The "Aryan Path")

Writing is like religion. Every man who feels the call must work out his own salvation.—**George Horace Lorimer**

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The writer does the most who gives his reader the most knowledge, and takes from him the least time.—**Sydney Smith**

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The only time you mustn't fail is the last time you try.—**Charles Kettering**

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Success in life depends upon persistent effort, upon the improvement of moments more than upon any other one thing.

—**Mary Baker Eddy**

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When I was a young man I observed that nine out of ten things I did were failures. I didn't want to be a failure. So I did ten times more work.

—**George Bernard Shaw**

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I believe the true road to preeminent success in any line is to make yourself master of that line.—**Andrew Carnegie**

Reform In University Education

By Gangadhar Gadgil

We are all keenly aware that there is something radically wrong with our university education. The frequent disturbances and closures of universities and the inquiries held into their affairs are symptoms of deep-rooted maladies that afflict these institutions. Nor is it as if the universities which do not hit the headlines are free from these maladies. They too suffer from them—maybe in a less virulent but in a no less insidious form.

The defects of our higher education have been enumerated time and again by various experts and commissions that have investigated university affairs. Our universities are overcrowded with students, many of whom ought not to be there at all. Compared to the students the number of teachers is relatively small. As a result a student can never get the individual attention and intensive training so essential for high educational standards.

Not only are the teachers few but their quality too is distressingly poor. The better university students are being increasingly absorbed in the Civil Service and in the technical and managerial cadres of private enterprise while the mediocrities are entering the poorly paid teaching profession.

Most of these teachers are engaged neither in research nor in intellectual exploration. They are content to be a trailer of stale knowledge stored up in standard text books. Some of them are no doubt engaged in research in fact they are under an obligation to do so if they happen to be the employees of university departments. But quite a bit of the research done in these departments is a scissors-and-paste affair and very often sterile pedantry is mistaken for scholarship at our universities. With such poor and inadequate teaching teaching that is largely divorced from research one can hardly expect the universities to maintain high educational standards.

Lack of Facilities

Poor library facilities do not improve matters. The libraries of most colleges are little more than collections of standard works. They hardly offer facilities for research and specialisation. They provide seating accommodation only for a tenth of the students, and the library staff is gene-

rally apathetic, inadequate and not very co-operative.

The universities prescribe standard courses in different subjects but these are not always framed with due care. Very often the syllabi are faithful copies or a rehash of the table of contents of standard books. The syllabi in each subject is accompanied by a list of books recommended for study. These syllabi form strait-jackets that effectively stifle education. They deprive the teacher of all initiative in chalking out a programme of work for his class. He has to adhere to the prescribed course of study and cover it from end to end in the course of his lectures. He must acquaint the students with the contents of the recommended books and it is quite useless to try to acquaint them with anything else for questions set at the examinations are always based on the recommended books. The teacher is neither expected nor has much of an opportunity to work out his own ideas on the subject he teaches for those ideas are not likely to be of much use in the examinations.

It is not my contention that universities ought not to prescribe courses of study or recommend books. But they should at the same time give scope for the exercise of initiative by the teacher in determining the manner and content of his teaching. He should be free to pursue and explore a line of thinking or a train of ideas if he finds it fruitful to do so. Such an exploration may involve a deviation from the syllabus and even neglect of some of the topics it contains. But it would be much more educative than a faithful coverage of prescribed courses.

Our system of examination is as faulty as the method of formulating courses of study. In fact it aggravates the faults of the latter. A student is examined once a year or once in two years. What counts is his performance in these examinations. What he does during the whole year is nobody's business. There is no device for making a student work during the whole year and testing his progress periodically.

Colleges are expected to conduct tutorials and tests but the performance of students in these tests does not generally count so far as the final examinations are concerned. These final examinations are

conducted for the university as a whole. They are divorced from the teaching done by individual teachers in the class-room. The questions set at these examinations get inevitably standardised; and equally inevitably there appear in the market books containing standard questions and answers. Despite the teacher's admonitions students avidly study these books, since they provide better answers to questions than what the average student can generally write by himself. The examinations thus become memory-tests, and the large number of answer-books every examiner has to assess makes it impossible for him to notice the subtle difference between a student who has tried to understand and a student who has just memorised.

Matters are made worse by the pressures to which an examiner is subjected. Any drastic change in the nature of the question-paper is not liked either by the students or by those who control the various colleges. Any stiffening of examination standards also gives rise to protests. The students do not like to waste a year, and managements of colleges do not like half-empty classes and consequent reduction in income. As a result, it has become almost impossible to improve the system of examinations.

Crisis of Character

Our society is today suffering from a crisis of character. Corruption is rampant in all walks of life and the universities are not free from it. Bribery is only one of its forms; it takes many other forms which are no less insidious. As a result, teachers have lost their self-respect and students their respect for the teachers. Discipline has ceased to be a source of joy and pride. Rigour and integrity have gone out of intellectual effort. Achievement is tainted by suspicion. Effort is replaced by less irksome substitutes. All this has led to a further lowering of standards.

It is not my contention that our universities do not have their good points. Nor do I want to suggest that all our universities suffer equally from all these defects. But it cannot be doubted that there is something seriously wrong with our universities. They are quite incapable, at the moment, of meeting the urgent needs of our developing democratic society. We require today hundreds of young men with the skill, character and vision necessary to handle complex problems and to man the

vast network of organisations that we are trying to build up, if our universities fail to prepare our young men for these jobs, our whole developmental effort will be in jeopardy.

There is thus an urgent need to improve the standards of university education. This need has been recognised and various efforts are being made in that direction. These efforts, however, have not met with any significant success so far. The causes of this inadequate success could be analysed, but such an analysis would not carry us very far. I would prefer instead to suggest a concrete, though modest, scheme for the improvement of educational standards.

The scheme, which I would call "The Pilot Colleges Scheme", is meant for the affiliating universities which predominate in our country, and is based on a frank recognition of the fact that it is impossible to raise immediately the standard of education in all the affiliated colleges of a university. Any such effort would involve denial of entry to many who aspire to university education. Such a denial would be at once impolitic and unjustified. There is evident today a powerful urge for university education among social classes that never had it before. Colleges are springing up in numerous small towns to satisfy this urge. These colleges are, on the whole, doing a lot of good in these towns. Books are being read, ideas discussed and cultural programmes staged for the first time in these areas. Young people, who used to migrate elsewhere for education, are staying on in these towns.

It would, therefore, be cruel to put an end to these welcome developments. What is more, any attempt to do so will be furiously opposed. It is no doubt true that this multiplication of colleges is contributing to the overall fall in educational standards. But this sacrifice of quality for the sake of quantity seems to be inevitable and necessary for the time being.

We do not have the resources, both human and monetary, that would be required for raising educational standards in all these colleges. Moreover, such an attempt will be resisted by vested interests; and raise organisational problems that will defeat it.

Yet we must create and maintain islands of superior education in the midst of this sea of mediocrity. This can be done by establishing pilot colleges, or by accord-

ing some good existing colleges that status. These pilot colleges can not only maintain high standards, but can also carry out educational experiments which, if successful, could be given a wider application. There is a great need for experimental work in higher education; and it can be met in no other way than through such pilot colleges.

Problem of Selection

The crucial problem in establishing these colleges will be the selection or approval of a nucleus of teachers and organisers to run them. This task should not be left to the organs of the university, such as the senate or the syndicate. Such large bodies always function on the basis of compromise, and compromise is the one thing that must be avoided in taking this crucial decision. The job should be left to a committee of eminent educationists, thinkers and social workers. These should be persons of unquestionable integrity and their eminence should not be 'ex officio' but genuine. I do not see why a determined vice-chancellor should not be able to persuade or cajole his senate to approve of the appointment of such a selection committee.

Once the band of teachers and organisers gets the approval of the selection committee, they should enjoy maximum possible autonomy. The university should see that the pilot college fulfils strict minimum requirements with regard to buildings, library facilities, qualifications of teachers, teacher-student ratio and the like. But the determination of syllabi, methods of teaching and assessment of the student's work should be left entirely to the teachers.

It is particularly important that the students should be tested by the teachers themselves. Only at the final examinations should external examiners be associated with paper-setting and assessment of answer-books. If there is a difference of opinion between the internal and the external examiner in respect of the question-paper, the views of the internal examiner should prevail. If, on the other hand, they differ in their assessment of the student's performance, the views of the external examiner should prevail. If the students get through the final examination, they should obtain the regular degrees of the university concerned.

Meeting the expenses

For a pilot college to do really fruitful work, it has to be a residential college.

That would make it possible for the students to live an intense communal life that is highly educative. Young minds learn as much from each other as they do from teachers. Moreover, if students live on the campus of the college, it will be easier to direct their studies and other activities.

Good education is bound to be expensive. The pilot college will, therefore, be a very expensive proposition. If the expenses can be met out of public funds, that will be welcome. The college would then be able to admit students strictly on the basis of merit. There is, however, a danger in depending upon public funds. This may place the pilot college at the mercy of bureaucrats and politicians, and such control could be fatal.

If public funds cannot be obtained without such control, I would prefer the pilot college to attain self-sufficiency by charging high fees. The fees should be high enough to enable the college to give freeships to at least 30 per cent of the students, who should be admitted strictly on the basis of merit. If parents are prepared to spend Rs. 2,000 a year for sending their boy to a good public school (like the one at Gwalior), there is no reason why they should not be prepared to pay high fees for sending their children to a first-rate college. It is true that education in the pilot college would then be available mainly to the rich, but it would also be available to some poor or middle-class students who otherwise would never get it.

I think it would be disastrous to convert any of the Government colleges into a pilot project. These colleges are subject to excessive bureaucratic control and it would be impossible to eliminate this altogether. The teachers in these colleges are themselves members of the bureaucracy and it is unlikely that they will be capable of bold and imaginative experimentation. Most of the existing private colleges also have serious shortcomings. A pilot college would, therefore, have to be a new institution.

Scope for Experimentation

A pilot college constituted along the lines suggested would be able to carry out many educational experiments and raise the standards of education. Courses of study would be more imaginatively framed and taught. There would be continuous and fruitful experimentation with courses.

General education, about which we have been talking so much, can never be imparted by the existing colleges under the existing conditions. It could be done only by the kind of pilot colleges I have in mind. Such a college would ensure intimate and fruitful contact between teachers and students as also among students themselves. It would inculcate in the students the habit of sitting regularly in the library and working throughout the year. The mugging up of standard text-books will be at a discount and independent thinking will be at a premium. The methods of testing students will be flexible and varied enough to suit the intellectual make-up of different students. The students will experience the thrill of creative thinking, an experience worth more than all the education that is being rammed down their throats in our colleges today.

The education imparted in the pilot college will not be purely academic. It will be an education in living—embracing and enriching all aspects of life. It will build up character. Every young student seeks among his teachers a hero, and, in the ideas they express, a basis for his idealism. These are his spiritual needs which society can ignore only at its peril. I see hundreds of students turning bitter and getting stunted because this need of theirs is not satisfied. I believe that, in the pilot college I have in mind, this need will be fulfilled.

Some might feel that I am demanding excessive autonomy for a pilot college, and that this autonomy may be misused. Such autonomy, however, is being partially enjoyed today by the public schools, as well as by institutions like the Indian Institute of Technology in Bombay. And I think it is being fruitfully utilised. There is no reason to believe that a pilot college with a capable band of teachers will misuse such autonomy.

The pilot college is an idealistic dream. It might fail to come true. This risk is always there. But risks have to be taken if we want progress. We are spending crores on buildings and laboratories which are not being put to proper use. Why not then gamble a few lakhs of rupees on a scheme which, if successful, can salvage our floundering educational system?

(Courtesy: 'The Illustrated Weekly')

EXPORT RISKS INSURANCE

Among the numerous measures, adopted in recent years to stimulate exports, has been the creation of a Corporation to provide protection to exporters against risks arising in overseas trade.

The Export Risks Insurance Corporation, which has its headquarters in Bombay, started functioning in October 1957. The entire capital of the Corporation is subscribed by the Government of India.

The Corporation provides cover against risks involved in the export of goods, on credit basis, which are not normally covered by commercial insurers.

The main risks covered by the Corporation's scheme include risks arising from import and export control, insolvency and default, diversion and transfer risks, war and civil war risks, and the risks arising from the exporter's inability to recoup expenses incurred on such promotional measures as market surveys and publicity.

Policies issued by the Corporation are treated as additional security by the banks, facilitating the supply of finance to exporters.

It is interesting that the facilities of the Corporation are being availed of by a large number of small exporters. Forty per cent of the policies issued in 1960 were for a maximum liability of Rs 50,000 or less.

In 1960, exports insured with the Corporation related to 69 different commodities shipped to 109 countries.

Although the value of the insured exports constituted a small fraction of the total insurable exports, in the case of a number of countries the insured exports were as much as 25 per cent of the total exports to those countries.

The fact that exporters benefit by the facilities furnished by the Corporation and the countries' exports grow is illustrated by these figures: In 1960, 21 exporters who insured their exports with the Corporation pushed up their exports from 25 to 100 per cent, 10 others from 100 to nearly 400 per cent and 20 others by more than 400 per cent.

Exports who secure insurance cover from the Corporation have to ensure their exports on a whole turnover basis, i.e., all the exports in a particular line have to be insured, not only a limited shipment.

Significance Of Panchayati Raj

By SHRIMAN NARAYAN,
Member, Planning Commission

The introduction of Panchayati Raj in several States of the Indian Union is, undoubtedly a very significant step in the progress of the Community Development movement. Through this process of wide and bold decentralization of political power in the country it would be possible to make our economic planning more realistic and effective.

There are, however, three basic conditions which must be fulfilled in order to make this experiment of Panchayati Raj a real success. Firstly, the Panchayats and the Panchayat Samitis should be constituted on the basis of the corporate life of the communities without the undue interference of organized political parties in the country. Indian village communities from times immemorial have been inspired by the ideal of "**Panch-Parmeshwar**" which implies that the people of the community should work for the community in a spirit of unity and cohesion. It is therefore unthinkable that the village Panchayats in India should function in terms of the Treasury Benches and the parties in Opposition as in the State legislatures and the Parliament. I have no doubt in my mind that the Western democracy as it is constituted today is not suitable for the functioning of the local and village institutions in our country. It is, therefore, absolutely necessary that the Indian political parties should solemnly decide not to set up official candidates in the elections to the Panchayati system even upto the district level. It will of course be open to the individual members of those political parties to contest the Panchayat elections in their personal capacity. It is true that this general convention of non-interference with local village institutions is not an easy matter for the political parties specially because the elections to the State legislatures and the Parliament are being conducted on party lines. Nevertheless in the interest of the success of the important experiment of Panchayati Raj in India I will earnestly appeal to all the political parties to honour the healthy convention of keeping aloof from the elections of these local village institutions and help the panchayats to build up healthy and composite democracy at the grass roots. In the absence of such a "gentleman's agree-

ment on behalf of the political parties in India, the introduction of Panchayati Raj instead of proving to be a boon to the masses, may be instrumental in disrupting the social and political life of the people almost in every village. This, indeed, will be a tragedy too deep for tears.

The success of the Panchayati Raj experiment will also largely depend upon the concrete steps that are taken by the Centre and the State Governments to decentralize economic power in a bold fashion by encouraging the organization of a large number of Industrial Cooperatives in the rural areas. Decentralization of political power alone will not be enough. Panchayati Raj will be almost meaningless without **Panchayati-Yojna**. Since the Panchayats and the Panchayat Samitis will be expected to frame and implement their local plans, it would be essential to enable them to organize village and cottage industries in their respective areas in order to provide fuller employment to the people as well as to increase the production of consumer goods. In the absence of a systematic organization of these rural industries, the formation of local village institutions will be more or less sound and fury signifying nothing. It is, therefore, imperative to take certain concrete steps to encourage cottage and village industries in the rural areas in a big way during the Third Plan period.

And lastly the introduction of Panchayati Raj can yield fruits of real value only if the Panches and the Sarpanches are properly educated and trained both in respect of their rights as well as duties. Over-emphasis only on the rights of the people in the rural areas will create a host of problems which would be very difficult to solve. It is therefore desirable to lay adequate emphasis from the very beginning on the duties and obligations of the village panchayats in regard to the well-being and prosperity of the masses. If the local village institutions are prepared to shoulder obligations and duties together with the enforcement of their rights, it would be possible to harness the idle manpower of the country on a big scale for the mobiliza-

(Continued on page 511)

Ways To Achieve Success In Life

By ROBERT J. LUMSDEN, B A.

You have your own idea of what constitutes success. It is equally certain that you would like those ideas to become a reality in your life—if you dare contemplate such a happy event.

Your success can be realised so long as your ideas are not wildly fantastic. They may, however, be such that at the moment they appear to you to be highly improbable and almost unbelievable. Never mind. Here are the steps you must take:

1. Visualisation: It is not enough to hope and dream vaguely. You must be definite. You must first stake a claim to the good things of life within the realm of thought.

As an architect first sees in his mind's eye the finished building before he begins work on his drawing board, so must you imagine with courage and definiteness, the good things you desire.

What I am advocating is not day-dreaming but constructive thinking directed towards the attainment of a certain goal.

Determine then, what you want from life, where you want it, and when. Decide what sort of person you wish to become, and the kind of work which would give you happiness and satisfaction.

In arriving at these decisions, bear in mind what your basic needs are—as revealed by psychology. One eminent authority recently summarised and listed these as follows:

Love. Security. Creative Expression. Recognition. New Experiences. Self-esteem.

You will not be basically happy unless at least most of these basic needs are in some way and to some extent satisfied.

2. Act: Having drawn up your plans and set your sights upon the target, the next step is to act. Apart from a few lucky football pool winners and heiresses, it is true to say that the people who successfully realise their dreams are people of action.

Florence Nightingale took her first steps towards her great nursing career by first attending the impoverished sick near her home. Lord Nuffield built up his great industrial empire because he first acted by opening his own little bicycle repair shop.

So it must be with you. You must act to realise your dreams. Success will never be handed to you on a plate. You must take the first step and then follow that by many more.

But remember the Chinese proverb: "A journey of a thousand miles begins with the first step." Unless that first step is taken your objective remains forever on the horizon.

It may well be that your first step seems far removed from your ultimate end. Nevertheless, take that first step. The moment you do so, you will have overcome the inertia of fear, laziness, and habit which may have kept you stationary for years. At last you will be moving towards your objective.

James decided that a key factor in the realisation of his dreams would be the possession of a certain qualification. To get that qualification he realised that he would have to devote every moment of his spare time to study for at least five years.

He took the first step towards this goal by enrolling with one of the reputable correspondence colleges to study for the first of the three examinations which lay before him. Though meeting with some setbacks, he eventually secured the coveted qualification which enabled many of his dreams of success to pass into the sphere of reality.

And all that came about because on one autumn day years before he had taken the first step of enrolment.

Whatever careful thought tells you is your first step, you would be well advised to take it immediately you have finished reading this article. The longer you procrastinate, the harder will it be to move.

3. Specialise: Another patent factor in success, no matter what the sphere, is to specialise in some way. "But in what way?" you may ask. "That's my problem!"

Three considerations should guide you in this matter.

What are the activities for which you have a flair? What would you really like to do? And what are you most suitable for, taking into consideration your personality, intelligence, training and background?

With answers to these questions in mind, determine what your speciality is going to be—music, accountancy, journey, ball-room dancing, teaching, writing or whatever it is—and then go all out for it.

Devote as much spare time as possible to it. Read every book you can find on the subject. Join the appropriate organisation. Take the periodical connected with it.

You will be surprised at the progress you will make once you begin to specialise in this way. Before long you will find that you are becoming known as a specialist in your chosen field.

Success in the full sense of the word comes to the man who specialises because he makes himself a member of a comparatively small group whose services are generally required by others.

This makes him feel wanted and significant. It will also provide avenue for self-expression, self-display, and service to the community. It might increase his income and often leads to new experiences.

It will be seen that these items tend to meet the basic needs outlined above.

4. Develop Your Potential: It may well be that in specialising you will also develop your potential.

Success demands the exploitation of many of our dormant abilities. The key word is dormant. It is important that you persuade yourself of the validity of this idea—that at this moment there lies undeveloped within you a wide diversity of gifts and abilities.

You are much more versatile than you imagine. Because education and other circumstances may not so far have revealed these latent powers, that is no proof that they do not exist.

You should dwell upon this exciting thought of your hidden wealth until it grips you. Think of it. You have the ability to be much more skilled, versatile and eloquent than you imagine.

With full confidence in this glorious fact, launch out boldly into new pursuits or follow old ones with renewed enthusiasm. That way, you will discover your hidden resources, develop your untapped abilities, and enter a new phase of exciting and colourful existence. These experiences are the ingredients of true success.

You are a veritable gold-mine—don't be afraid to dig for the nuggets!

5. Be Courageous: No life can be called successful if it is hemmed in by fears. We must therefore seek to eliminate them one by one.

In fact, we should be afraid of being afraid; for fear undermines happiness, saps our joys, inhibits our performance and restricts our activities.

Every fear should be faced, given a stranglehold and relentlessly throttled.

Develop the habit of positive thinking. Never anticipate defeat or expect the worst.

When we draw up our plans as advocated above, we need to be not timid but courageous. Similarly do we need to be courageous in the day-to-day determined application which will eventually bring our dreams to fruition.

Each new step forward will require a fresh bracing of the nerves; each day of effort will demand plucky persistence.

Remember that the biggest cause of failure is the spinelessness which gives up too soon.

Particularly do we need courage when the launching of some new enterprise is necessary for the realisation of our dreams. At such times we must think courageously, plan courageously, and act courageously. We have to be self-reliant and prepared to take chances.

The good things of this life seldom go to the timid and hesitant. We must develop a robust indifference to the opinions of others and go forward to claim life's prizes by growing in courage.

6. Develop Successful Human Relations: "Robust indifference to the opinions of others" does not mean ruthless disregard for them. Success in any sphere is empty glory if to achieve it we leave behind a trail of angry, bruised and broken spirits.

Few of us live on desert islands. Life for the majority consists of a steady stream of contacts with other people. And if we cannot live harmoniously with others, we cannot claim to have achieved true success.

What is the secret of harmonious human relationships, of being able to get along happily with others? Surely it lies in the one word **consideration**.

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THE MESSAGE OF BHOODAN

By SIDDHARAJ DHADDA

The word "Bhoodan" literally means gift of land, and in its outward form the movement has been one of receiving lands from those who owned them and giving away to those who were landless.

It is almost ten years now since the movement started. During the first six years after which the emphasis shifted to other aspects, about 4 million acres of land was received in the movement. The number of those who donated land was more than half a million. The gifts ranged from those amounting in some cases to hundreds of thousands of acres to those of fractions of an acre, and these came not only from the big owners but also from the smallest. In fact an overwhelmingly large number of donors were the smaller ones, who would themselves not have enough. However, while land and land donations were in the centre of the programme, the movement did not have a limited aim in view. In order to comprehend its true nature we shall have to look to the background and the circumstances obtaining at the time of its inception.

We in India fought for our independence from foreign domination and achieved it through non-violent means, howsoever halting and imperfect our non-violence may have been. We had a leader whose vision soared above the present and the immediate and who looked beyond on the wide vista of humanity. He became convinced that if humanity was to rid of the problems and ills that beset it all violence must be eschewed from human relationships. In other words, not only was the ideal society to be free from violence, hatred and jealousy but also the journey towards such an ideal was to be free from these corroding influences. All human problems, whether political, economic or social, had, therefore, to be solved through non-violent and truthful means. In short, Gandhiji wanted to revolutionize revolution itself. Untruth, violence, deceit have all been hitherto looked upon as legitimate means to employ in collective action for bringing about social changes.

It was, and continues to be, generally believed that the frontiers of ethics and morality end with individual and private relationships between human beings. Everything is fair, as the saying goes, in

war as in love. Gandhiji was perhaps the first in human history to have the faith, the courage and the conviction to assert—in any case to put it into practice—that untruth and violence were taboo even in the social and the collective sphere. He discovered and forged the weapon of satyagraha towards this end and applied it to the most important problem facing him, the question of Indian independence.

Our independence was achieved and then began the new task of tackling the far more fundamental and deep-seated problems of poverty and exploitation based on economic and social inequality. It was a curious coincidence that Gandhiji was removed from our midst soon after the attainment of independence. One act of the drama had ended—the theme, the scene and the chief actor disappeared and a new act began.

Social Inequalities

We had achieved our independence by peaceful and legitimate means if not by non-violent and truthful ones. But what about the great social and economic inequalities that were and are still eating into the very vitals of our national life? Could these problems be similarly tackled and solved by peaceful methods? Yes, why not, came the answer. Now we had the power of the State at our disposal which we could use to bring about the desired changes. Was not legislation a peaceful means and could we not use it to solve our economic and social problems?

A little deeper understanding would however, show that legislation was not the type of non-violence which Gandhiji had visualized. In a democracy legislation may be said to be very near to non-violence because it may be supposed to reflect the will of the people through their representatives. But experience was to prove that legislation, even if considered non-violent by this standard, could not at all be effective. One or two examples would suffice.

Untouchability is a great social evil. Gandhiji fought against it with his life. We 'abolished' it with a stroke of the pen, in the Constitution. But this has hardly made any difference as far as the actual practice is concerned, except the difference

which in any case would come and is coming about owing to the changing economic and social circumstances and outlook.

Land Reforms

Take the question of land itself. Our national leaders rightly gave importance and priority to land reforms in their post-independence plans. It was repeatedly emphasized by the Planning Commission that legislation should be undertaken with the utmost speed to eliminate the middleman and to fix a ceiling on land holdings with a view to providing as much land as possible to the actual tiller.

Even after 13 years of independence, however, we have not been able to go very far in this respect. Legislation regarding land ceilings is yet to be placed on the statute book in the majority of the States. Moreover, according to the calculations of the planning authorities themselves, even if all the States passed these laws, the total surplus land which would be secured through legislation and on payment of compensation would be somewhere near half a million acres throughout the country, that is only half the total quantity already distributed through Bhoodan viz., through voluntary renunciation without any compensation at all to the donors.

All this clearly shows that no fundamental social changes could be brought about through legislation, more so because the present methods of elections and post-election parliamentary functioning only strengthen the vested interests by placing the fruit of democracy namely, State power, into their hands. Legislation, moreover, leaves behind a trail of dissatisfaction—even bitterness in some cases—and promotes dodging.

After independence, however, our leaders took things for granted and began to pursue the beater track. Most of our leaders went into the seats of power, although in topmost among them had shown by his word and deed to do. Not only did Gandhiji, the leader of the revolution, not assume political power but as is now common knowledge, he wanted to keep the Congress organization also aloof from party politics and power. For, Gandhiji knew that the march towards real non-violence in social relationships lay not through State power or legislation but through constant education and inspiring of the masses. Mere absence of physical or out-

ward violence did not constitute the full-grown and positive non-violence as a social force which Gandhiji had in mind and which could create a momentum strong enough to bring about a social revolution through peaceful means. The problem of problems therefore, was to discover the non-violent dynamics of social change.

Gandhi's Disciple

Vinoba Bhave had been a close associate and disciple of Mahatma Gandhi ever since the latter established his ashram at Ahmedabad after his return from South Africa. But during Gandhiji's lifetime he kept himself confined in the ashram to researches in the various social and economic theories propounded from time to time by the former and in developing his own self.

After Gandhiji was taken away from us, Vinoba came out of his self-imposed seclusion and applied himself to the current social and national problems. Gandhiji had applied the technique of non-violence for the attainment of freedom. Poverty and the social and economic inequalities under which the masses groaned now called for urgent solution and Vinoba set his mind upon finding out the non-violent technique for the same.

It is against this background that the Bhoodan Movement should be seen and understood. When on April 18, 1951, during his walking tour of the Telengana area, where the communists had entrenched themselves and had organized a violent movement for seizing lands from big landlords and distributing these to the tillers, the landless labourers of the village where he was camping on that day asked Vinoba whether he could show them a non-violent way of getting lands from the landlords. Vinoba at once realized and saw the challenge face to face. He argued within himself that either he should provide a non-violent solution for the land problems or himself join the communists in so far as they were at least actively trying to solve it.

Compassion

What followed is now history, and I need not carry the story further. The first Bhoodan or the gift of land which Vinoba received on that day flashed the truth across his mind that compassion—or KARUNA as we call it—was the non-violent key to social change. It is on the

basis of compassion or fellow-feeling or by arousing the inherent instincts of sharing in man that the lasting foundations of a non-violent society could be laid.

Vinoba did not stop at enunciating the theory. He has proved its efficacy by continuous practice and application throughout these ten years. Nor did he stop at merely asking for land for the landless. He had made it clear from the very start that what he aimed at was the total abolition of private ownership of land and also generally in the other means of production. "Everyone for the community and the community for everyone of its members," was what he preached and it was obvious that this could be achieved only by arousing a feeling of oneness and of sharing within the community and not by fanning mutual jealousy or hatred. Vinoba thus provided the alternative to class conflict. Bhoodan soon developed into Gramdan, that is the voluntary surrender on a mass scale of ownership of land in a village to the village community. Then followed **Sampattidan**, or the sharing of wealth other than land, **Shramdan** or offering of bodily labour to the community and so on.

Red Challenge

Seen in the larger perspective, Bhoodan or the Way of Compassion, if I may so put it, meets the challenge of Communism. Equality is no doubt the spirit, the breath, of the present age. Nobody can stifle this urge. Communist leaders are trying to exploit this phenomenon by promoting class-hatred and riding to power on the wave of mass violence thus created. Bhoodan also shows the way to equality, but through compassion, that is by creating an atmosphere in which everybody, even who has not enough, would look to those below him with a view to doing his own little bit—howsoever little or insignificant it may be—for ameliorating the condition of the latter, and not look to those above him with an envious eye.

As Vinoba says, just as the water that rains on the hill-tops rushes down and down through the hills and dales, valleys and plains and even underground from the little ponds wherein it may have accumulated to meet its brother in the sea, so also let the stream of compassion flow uninterrupted from the higher to the lower strata in society! And remember, howsoever

lower you may find yourself to be, there is always another one who is still lower till all merge into the ocean of community. This is the central message of the Bhoodan movement.

(Courtesy: 'The Hindustan Times')

SIGNIFICANCE OF PANCHAYATI RAJ

(Continued from page 506)

tion of our internal resources. These panchayats which hold their elections almost unanimously and function in a smooth and harmonious manner by discharging their specified responsibilities in an effective manner should be positively encouraged by the State by transferring some more resources to them for developmental purposes. A spirit of healthy emulation will also be introduced by awarding suitable prizes, mainly in non-monetary terms, to those panchayats which show exemplary results in various spheres of developmental activities in their areas.

I do hope that the State Governments would accord a high priority to the experiment of Panchayati Raj during the current year so that various programmes under the Third Five Year Plan may be implemented throughout the country on the basis of sound and strong local democratic institutions in accordance with our ancient traditions (SPS)

WAYS TO ACHIEVE SUCCESS IN LIFE

(Continued from page 208)

If we consider the happiness, comfort, feelings of others, our behaviour cannot be of the kind which will create friction and strife. Automatically we shall be helpful, sympathetic, tolerant, and respectful.

These qualities constitute the lubricant which ensure the smooth running of every human contact.

Success in this sphere of human relationships crowns, beautifies and justifies success in every other.

(Courtesy: 'The Psychologist Magazine')

God has two dwellings, one in heaven and the other in meek and thankful hearts.—**Izask Walton**

Love for God and man is the true incentive in both healing and teaching.

—**Mary Baker Eddy**

Political Party And Democracy

By SATYAVRATA GHOSH

One of the most universally accepted assumptions of political theory is that the existence of Political Party is not only the proof of Democracy but is also essential to it. To say any thing to the contrary has been regarded, till very recent times, an act of political blasphemy. Of late, however, in some critical circles, doubts have appeared on the horizon as to the real relation between the two. Moreover, in the field of practical politics also we find that in some neighbouring countries Political Parties have been suppressed on the ground that they have been the root cause of all ills in public life. In our own country the experience with Political Parties has not been very encouraging either. The vulgar and unabashed scramble for power, both inter-Party and intra-Party, has made the saner section of thinkers reevaluate the importance of Political Parties. On 12th December, 1959, Vinoba Bhave, addressing a mass meeting in Bhatinda, made the categorical statement that Political Parties have done more harm than good. Jayaprakash Narayan has echoed the same sentiment at Karachi in his talk to the Congress of Cultural Freedom (Pakistan Unit). It is precisely from a like feeling or fear that Gandhiji, on the attainment of Independence, had advised the Congress to dissolve itself. A revolutionary philosopher like M. N. Roy came to the sad conclusion at the very culminating point of his colourful career that Political Parties, as hitherto understood, are merely instruments for capture of political power by rival groups for their own partisan end and are not the real agencies of Democracy.

To most of us, Party is an accepted fact of modern democratic political set up. Critically to estimate its role, for good or for evil, one must have a clear idea about its origin, work and end. In brief, political party is a curious phenomenon of contemporary political life. Constitutions and laws of the lands are usually silent about it. Yet, it is this very agency or instrument that influences the making, both of constitution and of law. For example, if the Congress Party were not in majority in the Indian Constituent Assembly, the Directive Principles of State Policy would not have included 'Prohibition' as an administrative ideal.

Political Party is an institution of relatively recent origin. It is as old as Representative Democracy, for, Direct Democracy needed no Party. Under Democracy, people enjoy the right to differ and the further right to express their difference. The right to differ has its concrete manifestation in the right periodically to wrest political power from its present holders. Such a situation brings into being what is known as the Political Party. Persons having similar political principles and programmes group themselves together into a party, try to persuade people to their own point of view and finally try to capture political power through popular support in the 'battle of the ballot-box', with the intention (let us suppose, sincere) of giving concrete shape to their distinctive ideas. To quote the language of a political scientist (Gettel),: 'Political Party is a group of citizens, more or less organised, who act as a political unit, and who, by the use of their voting power, aim to control the government and carry out their general policy.' Political Parties, in spite of their differences, however, agree on the fundamentals but for which peaceful functioning within a particular political framework will not be possible. For example, they must all accept the 'state' as the instrument of administration or abide by the principle of peaceful change of government. By this definition, however, Parties like the Communist or the Fascist parties are not Political Parties.

Historically, political parties have been found to exist only under Democracy and it has a logic behind it. Under Monarchy or Aristocracy, no individual, other than the ruler or the members of the ruling community, is supposed to have human dignity and does, therefore, have the freedom to express, organise or assert his ideas freely and institutionally. Being a product of Democracy, Political Party helps it in more ways than one.

It is a matter of universal acceptance that education and (political) intelligence are the two most essential requisites for the successful practice of Democracy. Political Parties play an important role in this regard. Because of the existence of Parties, issues of public importance are continually placed before the people in all their various aspects. As a result, the

political education and intelligence of the people enormously improve and they can better become true custodians of popular sovereignty.

Democracy; it is conceded, will ever remain an empty word if it is not able to make the masses politically active and interested. Public apathy reduces popular sovereignty to a mere myth, for, it is never exercised by the people. Political Parties can help a lot in this direction. They constantly din matters into the minds of men and, at the time of Election, almost physically draw the voters into the vortex of political activity. Moreover, by providing opportunity even to the poor to fight the Election with Party support, in men and money, they encourage men of meagre means actively to enter the arena of Election. A new enthusiasm is created among those who would have been, otherwise, left out of the political life of the country.

It has also been usually held that the existence of Political Parties is essential for healthy Democratic practice. For, if there is only one Party, it is likely that it will become irresponsible and unresponsive to public demand, ultimately leading to dictatorship. When there are two Parties or more, there is always a check on the Party in power, for, there is the dangling sword of Damocles of an alternative government. The fear of power being snatched away curbs the corrupting influence of power. Public liberty is more secure and Democracy becomes more real.

All these are certainly true, but there is always the other side of the medal. Recent experience has given us a rude shock that things are not as rosy as they have hitherto been painted in text-books or had appeared at the onset of Democracy and Political Party. In the very spheres in which Parties have served or can serve a Democratic purpose, they have done or may do the very opposite.

No doubt, parties place political problems before the people but in so doing they are more often than not inspired by partisan and not Democratic consideration. They hardly offer an objective and impartial picture of things with the idea of educating the public. They present only their own side of the case. This one-sided, at times even distorted, presentation of

them. ... aptly remarked, 'British Government believed in Divide and Rule while Political Parties believe in Confuse and Rule.' Moreover, cool, calm and considered action—the basis of Democracy—is not possible in a crowd. But the Party and its activities are always the expression of crowd behaviour in a crowd atmosphere.

Again, it is admitted that Parties pull men together and actually herd them into the polling booth during an Election. The result, however, is the very opposite of interest in political life. Rather, they develop an aversion for it. For, people are made the rope of the political tug-of-war and certainly it is not a very enviable position for the so-called sovereign citizens. The net result is that the sober and decent section among the citizens becomes averse to politics and avoids it. The arena is, thus, left free for the political adventurers who revel in the thoughtless atmosphere of mass hysteria.

Theoretically, it is certainly true that Parties make it possible for poor but deserving individuals to fight, and even win, Elections. But practice, however, presents an entirely different picture. More often, able ones are avoided or repressed. The more talented the person, the more independent will be his ideas and attitudes. Such a temperament does not find favour with Party bosses to whom—to quote *Finer*—a seat is better than a brain. It is thus found that the mediocre, if not the utterly worthless, ones by submission and subterfuge, by fawning and flattery, by any means fair or foul, manage to get the Party-ticket. And when power goes into the hands of such persons, one can easily imagine the fate of the Democracy that they represent.

Opposition certainly is a helpful factor in curbing authoritarian tendencies in the Party in power. But Opposition, to be fruitful, must be discriminating and constructive. But that is hardly to be found. It is usually an Opposition for the sake of Opposition. There is, however, a logic behind it. When there are various Parties in the field, each intent on capturing power at the next Election, the natural tendency for each is to bring down the other in public esteem. If, in such a situation, the Party in power launches on some constructive and commendable programme, other

cess. For, any success will be capitalised by the Party in power at the next Election as its achievement, a possibility which the Opposition Parties shall counter at all cost.

All these difficulties apart, Party system, in actual practice of government, leads invariably to any of the three positions given below. It must end either in a multi-Party system or a bi-Party system or a one-Party system (which is regarded as the negation of Democracy). Students of constitutional politics know well that the days of multi-Party system are counted for the obvious reason of the instability of administration as in France formerly. And an unstable government cannot be conducive to any orderly administration and certainly not to Democracy which is the most difficult of systems.

A bi-Party system has its obvious advantage and is very highly spoken of as ideal for Democracy. But is it really as Democratic as it is usually made out to be? Bi-Partisanship guarantees absolute majority to any one Party. This leads to a rather dangerous situation. In the inter-Election period nothing prevents (unless there is an effective system of recall which very few constitutions provide) the majority Party to become dictatorial. At the best, it can be argued that the dictatorship is of a Party and not of a person. But in reality there is not much difference. The Party, in its turn, is hierarchically organised with only a limited number of men controlling its fate. In the ultimate analysis, therefore, Party dictatorship is the dictatorship of a few persons, the Party bosses.

Moreover, whichever Party once gets to power through the Democratic method of Election, tries to perpetuate its power by fair means or foul. If it succeeds, there will be one Party rule which is said to be the negation of Democracy. It actually happened in Italy and Germany. The Fascists and the Nazis, once in power, gradually eliminated others in the field till theirs was the only Party left unchallenged in its imperium and Democracy was buried deep.

Not only this. In certain countries, faced with a critical situation, attempts have been made to form coalition cabinets, called variously by the name of National Government as in MacDonald's England or Popular Front Government as in Blum's France. Whatever the name, the net re-

sult is the same—elimination of Opposition (by suppression as under Fascism or by coalition as in England or France) and the establishment of one Party government with the consequent death to Democracy. But such a situation is inevitable by the logic of the Political Parties as they are today when the fight is more for the capture of power than for popular good—the avowed object of capture of power. The means become the end. Power is claimed and subsequently gained for serving the society. But the moment any Party comes to power, it suffers from the constant fear that others, alive in the field, will always try to snatch it away. Natural, therefore, it is for the Party in power to consolidate itself fully before it can securely launch on its programme of political reconstruction. This process of consolidation is never complete unless all the other Parties are obliterated. Such an attempt reasonably produces resistance among others and clamour and clash consequently become the order of the day. That is what we are daily witnessing, much at the cost of public suffering.

There is yet another point for consideration. The very necessity for Political Parties, viz., the inability of the masses to understand the implications of the intricate political problems of today and also the lack of political enthusiasm and alertness on their part, is an adverse reflection on Democracy. If the masses really do not have the necessary intelligence, alertness and interest, they can never be the safe custodians of sovereign power. What then actually happens is, as is happening almost everywhere, that a few clever, at times unscrupulous, individuals carry on the so-called Democracy in the name of the people. It may then be the government of the people and for the people, at the best, never the government by the people. Actually, what the Parties demand is the surrender of the sovereign power to themselves during the inter-Election period. Apart from the theoretical controversy whether sovereignty can be surrendered, the fact is that the masses cannot remain sovereign after surrendering power. One cannot eat the cake and have it too. Therefore, either the masses remain sovereign and exercise the power themselves or they give it away to the Parties and Democracy is dead. Political Parties demand

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Trade Union Movement In India

By L. N. MISHRA

Real democracy is much more than adult suffrage and parliamentary form of government; it means a reordering of social relationships. Democratic processes are complex and they make large demands on all sections of the people, including the trade unions.

A trade union is essentially an organization of workers designed to do for its members, by combination of things, which the workers, acting in isolation, could not do for themselves. It is meant especially to help them get collectively better terms of employment or service conditions than they could expect to get if each individual had to make a private bargain.

In recent years, however, trade union functions have developed rapidly over a wide field and their impact is felt almost every where. They appoint representatives to all manner of councils and committees, dealing with questions of economic and social policy; and in some cases they participate in the control and management of industrial enterprises or are given a special status in schemes for joint consultation concerning matters such as productivity, the prevention of accidents etc.

These significant changes in the status of the worker impose a heavy responsibility on the workers' organizations to see that this influence is not misused. These organizations can play a great part in educating their members and to enable them to discharge their functions usefully. The concept of 'master and servant' in the industrial field is obsolete today and has been replaced by that of co-partners in production. The credit for bringing about this change in attitude must be shared between progressive employers and enlightened trade unionists, on the one hand, and the positive policies of the Government, on the other.

The Five-Year Plans have attempted to translate into concrete targets the needs of the people and the possibilities of development. For their successful implementation co-operation from trade unions and employers is absolutely essential. Steps continue to be taken in this direction and the nation watches with interest the results that flow from such co-operation.

Weaknesses

During the last decade or so this co-

operation has developed and is crystallizing gradually. But all the same many weaknesses inherent in the trade union movement came to light in these years, which have, to a large extent, checkmated the progress of smooth industrial relations. Important among these are: Political rivalries leading to multiplicity of unions and disunity in the ranks of working class, illiteracy among workers, absence of proper leadership at lower levels, want of trained personnel and inadequacy of funds. These are some of the major handicaps from which the trade unions in India suffer and unless a bold and imaginative programme is adopted to remedy these ills, the movement is bound to remain decrepit and dwarfed.

Some positive steps have been taken in recent years to strengthen trade union movement. The phased programme of workers' education on a countrywide basis and the scheme relating to workers' participation in management now being tried in a few selected industrial undertakings are the pillars of a healthy growth and point towards a new policy to strengthen the movement in the country. It is expected that these experiments will provide the necessary training in the new philosophy of trade unionism and the methods and objectives of a stable trade union movement. The Code of Discipline in Industry and the Code of Conduct, evolved as a result of tripartite endeavour and ratified, by the central organizations of employers and workers, are novel experiments evolved on a voluntary basis to make them see their obligations and duty to the country.

These ideas and experiments have to be properly understood and given a practical connotation by the parties themselves. They have to liberalize their outlook, shed age-old prejudices and develop a sense of responsibility to the nation.

It has been stated quite often that the trade union movement in India was weak because trade unions relied more on labour laws than on collective bargaining and were subservient to political parties. There is an element of truth in these charges against the movement. There is no doubt that trade unionists should avoid trials of strength and resort increasingly to collective bargaining. With this ap-

proach they might not immediately achieve all that they want but they would thereby build a strong, healthy movement, which would enable them to achieve their ends.

Collective Bargaining

Experience of the industrialized countries of the world bears ample testimony to the fact that collective bargaining has played a very important role in establishing industrial relations on a sound footing. In the U.K., the trade unions, skilfully exploiting the existence of a sellers market for labour, have established a remarkable degree of control over those management decisions which directly affect the day-to-day life of the worker. This they have done by extending the field of collective bargaining far beyond the traditional questions of wages and hours. In the U.K. the influence of the working class on national policies grew with the increased political power of the Labour Party. It is a point of interest to find that although the Labour Party was often influenced by the trade unions, it did not have much control on the decision and policy of the trade unions. This is unlike our country where political parties have considerable influence not only on policy but in some cases even on day-to-day administration of the trade unions.

In the United States, the unions exercise an even more pervasive control over management decisions. This they have achieved, again, by transforming still more completely the nature of collective bargaining. The classic bargain was a top-level affair, negotiated only at relatively long intervals, and confined to the subject of wages and conditions. Now bargaining is extended both horizontally to include a much wider range of subjects and to embrace continuous, day-to-day negotiations at the plant level.

Labour unions in the United States differ from those in many countries because they have no direct connection with any political party or social group. There is no ideological uniformity among American unions. But there is this important thing to remember, as one labour leader once put it: "Labour's objective of making tomorrow better than yesterday is predicated on its acceptance of capitalism." Labour, and the individual labour, consider themselves as an important and essential element of a classless society. As a result, American labour unions serve the

American worker as a tool for gaining and keeping, as an individual, the status and security of a full citizen in a democratic society.

In most of the industrially advanced countries of the West trade unions have become firmly established and are accepted as part of the social structure. Recognized as spokesmen for large groups of the population, they play an active part in the general, social, political and economic life of the community.

Sound Leadership

In India, trade unions are still to come of age. They are often organized as adjuncts to political parties and in some cases are directly controlled by them. However, the movement has come to stay and it has built a tradition of sound leadership in course of its short life. But sectional interests still continue to dominate the scene and hamper the national outlook. The multiplicity of unions is a by-product of the existence of different political parties trying to win the support of workers by championing their cause. This has a weakening effect on the movement and has to be guarded against.

In the future economic organization of our country the trade union must be one of the most important components of the new structure carrying both high responsibility and great privileges. Without genuine unity trade unions cannot attain that high status. This will be the loss of a most vital element in the building up of a true and living democracy. It is natural that both employers and employees should be anxious to get a larger share of the total wealth produced by industry. This can be best achieved by close collaboration and adjustment.

In the conditions of today there is hardly any scope for hostility in the employer-employee relationship. It is only through industrial development and greater and more efficient production that there lies the hope of better wages, better living conditions and greater employment opportunities. Employers must appreciate one point: a discontented labour force is always a source of trouble and a drag in the way of increasing production. It is, therefore, of paramount importance that employers and employees re-orientate their outlook and realize that they are co-partners in a joint enterprise.

ENERGY IN AN ATOM

By Dr. B. V. THOSAR

It was at the Cavendish Laboratory in Cambridge under the distinguished leadership of Lord Rutherford that the present picture of the atom gradually took shape, some 30 to 40 years ago.

It was then shown that the atom of an element consists of a positively charged nucleus surrounded by a number of negatively charged particles called electrons, moving in orbits. The number of electrons is just sufficient to balance their total negative charge against the positive charge on the nucleus, the atom as a whole being electrically neutral.

It was then realised that what distinguished one element from another was the number of elementary positive charges on the nucleus of its atom or the number of planetary electrons in the atom.

Thus hydrogen atom has one unit positive charge on its nucleus, helium has two, iron has twenty-six, gold seventy-nine and so on.

The chemical properties of an element could be explained in terms of the behaviour of these planetary electrons in the atom, particularly those in the outermost orbits. So also the visible or ultra-violet radiations emitted by atoms when they are excited as in an electric arc or spark are quite satisfactorily explained in terms of these outermost electrons and their orbits around the nucleus.

In considering this chemical or spectroscopic behaviour of atoms, the nucleus of the atom does not figure prominently, except as a positively charged centre around which the negatively charged cloud of electrons is held. The nature and constitution of the atomic nucleus is not relevant in considering those properties of the atoms.

The Proton

It was soon realised that the fundamental particle in the nucleus, which is the carrier of the elementary positive charge is the proton which is in fact the nucleus of hydrogen atom, the lightest of known atoms. The nuclei of other heavier elements will have a varying number of such protons in them.

This number of protons in an atomic nucleus, called the atomic number, is characteristic of the element and equals the

number of planetary electrons surrounding the nucleus. Thus, hydrogen has one proton in its nucleus, helium two, iron 26, gold 79 and so on. A proton carries a positive unit of electric charge and an electron a negative unit; but the proton mass is some 1,800 times more than the electron mass.

Thus, the mass of an atom is mainly concentrated in the nucleus and very little in the surrounding electron cloud.

In studying the nuclear charge and nuclear mass in the atoms of a given element, it was found that the same element could have a discrete number of different atomic masses, though the nuclear charge, that is the proton number, in their nuclei in all of them was the same. Such atoms, with the same nuclear charge but different masses are called isotopes.

Thus many elements have several stable isotopes occurring in nature. Hydrogen for instance has one stable isotope called heavy hydrogen or deuterium, which has nearly double the atomic mass as ordinary hydrogen. Uranium has two—uranium with mass number 238 and the much rarer variety, uranium 235.

This situation was clearly understood and explained after the other fundamental particle, the neutron, was discovered and its properties studied. The famous names of Chadwick, Fermi and Joliot-Curie are associated with this development. The neutron is a particle similar to the proton in mass but it is electrically neutral. The addition of a neutron to a nucleus would, thus, increase its mass, without altering the nuclear charge.

The nucleus of an atom of a given element is thus made up of protons and neutrons. The number of protons or the charge number determines what element it is, while the number of protons and neutrons together determines its mass-number, that is, which particular isotope it is.

The nucleus of heavy hydrogen will thus have a proton and a neutron while that of ordinary hydrogen will have just one proton in it, though both are chemically similar.

Uranium Types

In the same way, the number of nu-

cleons—this is an omnibus word which applies to protons as well as neutrons—in one kind of uranium nucleus is 235, while in the other it is 238, though both have the same nuclear charge or proton number 92.

The other important result which emerged out of this neutron-proton picture of the nucleus is concerned with stability of nuclei. It is found that for a given element, that is, for a given proton number, only certain discrete numbers of neutrons can co-exist, within its nucleus to give stable nuclei—these are the stable isotopes of the element. If the number of neutrons is either more or less, then the resulting nucleus is unstable, giving what are called unstable isotopes.

Such unstable nuclei, in course of time, revert to a stable condition, by readjusting the proton-neutron ratio on them by giving out a pair of protons and a pair of neutrons bound together, which is called an Alpha-particle or by giving out an electron which is termed Beta-particle. This process is commonly known as radio-activity.

Nucleus Breaks Up

In the case of some heavier nuclei like uranium, this instability manifests itself in an altogether different way—in what is now known as fission, that is, the break-up of the heavy nucleus in two more or less equal parts. This process of fission, as is now well known, forms the basis of production of atomic energy and is initiated and sustained as a chain reaction by the absorption of neutrons by the nuclei of fissionable material.

It was through these attempts to understand the nature and constitution of the nucleus that exciting new possibilities of harnessing atomic energy were discovered. On the other hand, in exploiting atomic energy for peaceful purposes, new tools for probing deeper into nuclear structure are becoming available. The device invented to extract nuclear energy in a controlled manner is now well known as the 'atomic reactor.'

Apart from the production of atomic energy, the reactor can also be used as a powerful tool for research in problems of nuclear structure. This is so mainly because, in the reactor, through the physical processes going on in it, a copious supply of neutrons is produced. Never before in devices or machines built on laboratory

scale, neutrons in such quantities were available.

And the neutron is a fundamental particle, which is specially fitted to act as a probe into the structure of the nucleus. This is because it is electrically neutral and carries no charge and can, therefore, penetrate deeper into the atom and nucleus which is itself positively charged and has the negative electronic clouds around it.

Neutron Scattering

The neutron can be used for probing into the nucleus in two ways. The first method consists of studying the manner in which a beam of neutrons is scattered by nuclei in a plate of matter. From the observed weakening of the beam of neutrons as it comes out of scattering material, one can, in the first place, compute the size of the nuclei.

From such experiments it is found that heavier nuclei are larger in size, in such a way that the nuclear volume is about proportional to the atomic weight. This means that nuclear matter has nearly a constant density of 10,000 million tons per cubic inch. This is to be expected if nuclei are formed from protons and neutrons, packed together as closely as possible. One can also study what is called the angular distribution of scattered neutrons, that is one counts the number of neutrons reflected by a certain angle and such measurements are taken at different angles.

Alternate increase and decrease in scattered intensity is found as the angle of scattering increases. This is really like the diffraction halos or rings one sees around a street lamp or the moon when seen through a fog consisting of fine droplets of water. One gets a similar estimate of the size of the nuclei from such experiments.

There is another interesting result which comes out of these investigations and it is that the nucleus has no sharp boundary—it is somewhat 'fuzzy'. It is like a new tennis ball rather than a steel ball.

Scattering experiments with very fast electrons at Stanford in California have also confirmed this picture of the nucleus and have further revealed that the protons are uniformly distributed through the nucleus. This was a rather surprising

result as, being similarly charged, they repel each other and would, therefore, be expected to tend towards the nuclear surface.

Shell Model

Just as excited energy states of the atom are studied through the optical radiations emitted by excited atoms, say, in an electric arc or spark, similarly nuclear energy levels are studied through investigation of beta and gamma rays emitted by radioactive nuclei. This has led to what is called the 'shell model' of the nucleus, which pictures the neutrons within the nucleus as arranging themselves, crudely speaking in successive shells of increasing energy.

Those nuclei which contain only complete shells of protons or neutrons are characterised by increased stability and abundance. The corresponding numbers of protons or neutrons required to complete such shells were called 'magic numbers', at first sarcastically but now affectionately, as one author has put it.

Research Prospects

The consideration of magnetic properties of nuclei and the properties of nuclear excitation levels requires that nucleons should be assigned to what may be called specific orbits within the nucleus. At the same time phenomena like fission lead to a nuclear model in which protons and neutrons form a conglomerate similar to a drop of liquid.

Much information of a qualitative nature now exists about nuclei—their size, fuzziness and shape. But a complete understanding of the nature and constitution of the nucleus and of nuclear forces is yet to be attained. Intensive nuclear research, made possible by recent developments in atomic energy will no doubt lead to such an understanding in the near future. (Courtesy: 'A. I. R., Bombay')

The heart has its reasons, which reason does not know.—Blaise Pascal

* * *

'Tis motive exalts the action.

—M.J. Preston

* * *

A man always has two reasons for doing anything—a good reason and the real reason.—J.P. Morgan

POLITICAL PARTY AND DEMOCRACY

(Continued from page 514)

the latter and must, therefore, bear the responsibility of the demise of Democracy.

It is natural that many will arrive to the conclusion that Political Parties should better be done away with. At the present moment this may be a rather rash step to take. A Party-less condition of society may well be the ideal for some distant date; but with the human element at hand today, it is not likely to be a success. It is, thus, necessary to retain Political Party and yet free it from its anti-Democratic potentiality. This demands a complete revaluation of the present-day concept of the Party as the apparatus for capture of political power. To begin with, it must give up the arrogant idea, so very prevalent in practice though not conceded in theory, that it is to rule on behalf of the people because they are unable to rule themselves. In practice, it becomes ruling **over the people**. Admitting that they actually are, it becomes all the more the duty of the Party truly to educate them. In educating the people it actually commits 'suicide', that is, it makes way for a condition when people will be fit to rule themselves which is real Democracy and the Party will be superfluous.

In the same way, a Party must enthuse the people themselves to take active part in matters of public importance and never try to usurp the power which, under real Democracy, rightfully belongs to them and them alone. This is practically possible only when Parties are no more regarded as rival instruments for the capture of power. It must, however, be of universal acceptance, for, otherwise, if one Party captures power, others will try to oust it. And the scramble for power will continue, as today, with the result that not only Democracy will not be realised but also public life will be vulgarised. The only constructive and Democratic purpose of a Party is to help create conditions in which the Party will no more be necessary, a sort of self-abnegation. It is certainly an ambitious expectation but this way alone lies the road to real Democracy.

(Courtesy: 'Vigil')

It is man's motive that counts for righteousness, not his outer act alone.

—Blanche Huntington

ROUND THE WORLD IN STATISTICS

By Daniel Behrman

Britons read more newspapers than anyone else on the face of the earth, but Soviet citizens have the largest number of public library books at their disposal. No one goes to the cinema as often as an Austrian, even though Japan leads the world in the number of full-length films produced annually. The United States has the most university students, but the U.S.S.R. has the most students studying engineering.

These are only a few of the nuggets to be gleaned from 182 pages of statistical ore contained in the newest edition of "Basic Facts and Figures", a Unesco annual publication which, at first sight, is about as attractive reading as a bank statement or a telephone directory.

But, despite this dense packing of "international statistics relating to education, culture and mass communication" into lists of countries (no less than 219 countries and territories are mentioned), columns of figures and slabs of footnotes, a profile of our world in its learning and at its leisure can be drawn from "Basic Facts and Figures".

Some of the data is impressive (only 59 out of 1,000 Americans do not possess radios) and some of it is rather startling (the world's most fortunate school-children, and perhaps the world's most fortunate teachers—at least in terms of number of pupils per teacher—are to be found on St. Pierre and Miquelon, two French islands off the coast of Canada, where there are only twelve children per teacher). Some of it is tragic, too, in the long ranks of nations with only 16 or 17 or 25 per cent of their school-age children actually afforded an opportunity to go to school.

Students and Graduates

Let's turn to a few of the facets of this statistical portrait (or better, panorama) of the world, because no one could hope to take in all of them in one dose.

Thumbing through the pages of "Basic Facts and Figures", you learn that the United States leads the world in the number of university students, with 3,236,414, followed by the U.S.S.R. with 2,260,000 (287,164 Americans students are listed as studying engineering and the parallel figure in the Soviet Union is 765,000). Next comes India with 833,450 students and

Japan with 636,232. France leads Europe with 226,173 students, followed by the Federal Republic of Germany and Italy in a near dead-heat: 164,015 and 163,945 respectively.

A word of warning: there is not much agreement throughout the world as to what constitutes a "university student". As a famous man is supposed to have said, "there are lies, damned lies and statistics".

But the figures do show that the United States also leads the world in the annual number of university graduates—438,023—followed by the U.S.S.R. with 290,700 (the two leaders change places in the figures for scientific and technical graduates—114,600 in the U.S.S.R. and 96,509 in the U.S.A.).

More foreign students—47,245, to be exact—study in the United States than anywhere else. The next biggest attraction is France with 17,456 foreign students, followed by the Federal Republic of Germany with 15,115.

Rather scanty figures on overall percentage of national income spent in 1958 on education show Puerto Rico in the lead with 6.9 per cent and Finland second with 6.5 per cent.

Books, Newspapers, Films

Now for a digest of what the world does in its spare time: for the Soviet citizen, there are 752,604,000 public library books, compared to 200,000,000 in the United States and 71,000,000 in the United Kingdom, the two runners-up. The U.S.S.R. also ranks first in the number of museum-goers with 39,900,000 annually, compared to 10,994,000 in the United Kingdom and 10,439,000 in Japan (the three leaders according to available figures).

Newspapers are another story. Here are the readership rates per 1,000 in the world's most newspaper-minded countries: United Kingdom, 573; Sweden, 464; Luxembourg, 429; and Finland, 420. The United States leads in the number of daily papers, 1,745, but sells them to only 327 out of every 1,000 Americans. On the other hand, 475 out of every 1,000 Americans read magazines of general interest, the highest figure in the world.

When the American buys a newspaper, he is offered an impressive number of

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PEOPLE WANT TO KNOW

By LUCIEN NEREI

QUESTION:

H. B. Sharma, of Bhopal, India, writes: "Niels Bohr's conception of the atom is like a solar system in which electrons move in orbits, also associated with the spin. Do the planes of these orbits also rotate occupying the spherical space or, like our planets, do they continue rotating approximately on one plane having slightly fixed inclined orbit planes with respect to each other?"

ANSWER:

In 1912, the Danish scientist, Niels Bohr, and the British scientist Ernest Rutherford, suggested a conception of the atom modelled on our solar system. In this planetary pattern of the atom, the nucleus occupies the place of the Sun while the electrons are the planets. According to this conception, the electron, which is in constant movement, would tend to escape through centrifugal force, but is compelled to remain in orbit by the attraction of the nucleus. Thus there should be one orbit for the single electron of the hydrogen atom, two separate orbits for the two electrons of the helium atom, and 92 orbits for the 92 electrons of the uranium atom. These orbits are not visualised as being concentrated in one plane, but form rather a sort of 'shell' around the nucleus.

Because it appeals to the scientific mind, this idea of a planetary pattern of the atom met with a good deal of interest, but nowadays, most scientists agree that it errs on the side of over-simplification. The trajectories of the electrons are not as constant as those of the planets in the solar system. Under certain conditions, it sometimes happens that the electrons increase their speed of movement and thus change their trajectory. They have even been known to escape from the attraction of the nucleus and to take off on their own. Such disturbances occur, for example, when one heats the filament of an electronic tube in a radio receiver, or in a fluorescent neon tube.

In its normal state, an electron rotates around the nucleus in a given orbit; it has a certain specific energy which is characteristic of this orbit. But when the electron is stimulated, it changes its orbit and its energy changes also. These changes in energy, or rather in the level of energy, can be observed as rays of light, caused

by an emission of photons. The photon is a tiny "grain" of light which is created when the electron jumps from one orbit to another. These jumps are a consequence of the "quantum" nature of energy. Nothing in the movement of planets in the solar system corresponds to them.

QUESTION:

A listener of Radio Noumea, in New Caledonia, asks: "How can men and women with dark skin have light-skinned children, commonly called 'albinos'? What is the reason for this?"

ANSWER:

Albinism is caused by the partial or complete absence of certain organic pigments. The skin is therefore light, the hair white, the eyes pink. In africans, albinism is generally partial, in white people it is nearly always complete.

The exact causes of albinism are not yet known. Some experts believe that it is a throwback to characteristics that existed in the past, during the ice age. This theory is based on the fact that certain animals change their coat in winter and that among the very fair-haired populations of Scandinavian countries and Northern Germany there are many albinos. It would appear that the climatic conditions in these cold, damp regions encourage albinism. In the animal world, all species are subject to albinism, and there are even cases of albino plants.

QUESTION:

Fakir Chand Shah, lecturer at the Municipal Secondary School, Kharsia, M.P., India, asks: "Please outline the modern scientific theories of terrestrial magnetism, with special reference to new data gathered during the recent International Geophysical Year".

ANSWER:

In spite of the enormous amount of data on terrestrial magnetism collected during the IGY., it is still impossible to suggest an explanation for the earth's magnetic field which would be acceptable to all scientists.

The theory which has aroused greatest interest in the scientific world is based on a difference in speed of rotation between the two basic parts of the earth, the core and the mantle. According to this theory, the two parts revolve at different speeds,

and the relative motion between them creates electric currents which give rise to a magnetic field. In this conception, the structure of the earth might be compared to a dynamo, the core or nucleus acting as the armature, the mantle as the field magnet. Naturally this comparison is only very approximate because an important outside influence plays a role in terrestrial magnetism. This is the cosmic electromagnetic field in which the sun plays a major part through the ionosphere, as has been disclosed by the data received from artificial satellites.

Recently, some authors have suggested another explanation for the earth's magnetic field. They believe that it is caused by convection currents. These convection currents are set up by the movements of molten rock, which are thought to circulate inside the earth conveying electric charges within a closed circuit. Actually, the puzzle of the earth's magnetic field still remains to be solved, all the more so since it is now an accepted fact that the orientation and the intensity of this field have varied at different periods in the earth's history. Paradoxically, it is probably through study of the space surrounding our planet that we will be able to gather the best information on the problem.

QUESTION:

Guillermo Jobon, of Bello, Antioquia, Colombia, asks: "When an electric discharge takes place between a cloud and the earth, how far does the lightning strike?"

ANSWER:

Lightning is really a double phenomenon. First of all, a discharge leaves the base of a cloud travelling in a downward direction. When it nears the ground, it meets another very bright and intense discharge, which shoots up from the ground and tends to rise along the same path as the one that has just left the cloud. Actually, contrary to appearances, the most spectacular part of the flash rises from the ground. As this back-flash can reach an intensity of 30,000 amperes, it leaves physical traces, chiefly of burning, which are often visible to a depth of several centimetres on the earth's surface. Fulgurites formed by the fusion of silica in the sand, have been found in the Sahara, vitrified to a depth of 50 centimetres (7 inches). The electric discharge which created these ful-

gurites must have given rise to a temperature of about 1,500 C. (2,700 F.) through nearly 3 ft. of the sand. (UNESCO)

ROUND THE WORLD IN STATISTICS

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pages. That is why newsprint consumption per capita in the United States is 33.6 kilograms (a kilogram is 2.2 pounds), the world's highest figure, followed by 27.2 kilograms in Australia and 25.5 in New Zealand.

Other countries appear when you turn to the chapter of film attendance. Austrians are the most avid cinema-goers: 17.4 per thousand. Next come Malta with 17.3, New Zealand with 16.7 and the U.S.S.R. with 16.2. In North America, Greenland with 14.8 outstrips the United States with 12.5.

Who makes the most pictures? The answer is Japan, whose 516 full-length films in 1958 rank it first over India, 295; the United States, 288; Hong Kong, 240; France, 126; and the United Kingdom, 121.

TV—Monaco Leads

Latest available figures (at the end of 1959) for television-viewing show that the country with the most sets per thousand inhabitants is Monaco (a staggering 524). Next are the United States, 290; Canada, 196; the United Kingdom, 195; and Bermuda, 182.

Again, leadership changes hands when you turn to books. First is the U.S.S.R. with 69,072 new titles annually, followed by Japan, 24,152; the United Kingdom, 20,690; the Federal Republic of Germany, 16,532; the United States, 14,876 and France, 12,032.

The Soviet Union also published the most translations in 1958—a total of 4,457 in the various languages of the Union—followed by Germany (figures are for the Federal and the Democratic Republics) with 2,512, and Czechoslovakia with 1,462. English was the world's most translated language that year: 9,675 works out of a total of 29,209. Next were Russian, 4,320; French, 4,010, and German, 2,951.

There is some electric reading, too, to be found among the world's five most translated authors in 1958. They are Lenin, Shakespeare, Jules Verne, Tolstoy and Dostoevsky in that order, with Gorky and Simenon as runners-up. The world's most translated single book, though, was the Bible. (UNESCO)

HISTORY OF CONGO

By HARI SHARAN CHHABRA

Today, we hear so much of the Congo, its leaders and the present-day sufferings of the Congolese. History of the Congo after 1908, when it became a colony of the Belgians—a none too honourable record—has been made familiar in the past some months, but very little, indeed, is known about the past of this Central African territory. Its past and ancient history is remarkably colourful and makes a fascinating, but at the same time a distressing story.

While on the west coast of Africa flourished the Ghana and Mali Empires (starting from the 4th century A.D.) and in the neighbourhood of the Congo flourished the Zimbabwe civilization (somewhere in the 8th and 9th century A.D.), African kingdoms and confederations also existed in the Congo basin. But the earliest records dealing with the latter are available from the 15th century, when the Portuguese, after their discovery of the West African regions, directed their attention to the regions of Central Africa.

Contact with West

The best record available is the travels of Duarte Lopez, a courageous and an enterprising Portuguese traveller in the traditions of Ibn Batuta and Marco Polo. He was there in the Congo in 1578 and his travels have been preciously recorded in a book 'A History of the Kingdom of Congo' by Phillippo Pigafetta; translated in English by Abraham Hartwell in 1597 and by Thomas Fowell Buxton in 1881. Before Duarte Lopez came another Portuguese Diego Cab—a contemporary of Vasco da Gama. He reached the Congo estuary in 1484 to discover that there were in existence in Central Africa a number of Negro empires. Diego Cao's visit is considered historic because soon after him followed Christian missionaries and Christianity was introduced in these empires in the last decade of the 15th century. It is on record that Mani Sogno (Mani means Lord) was the first chieftain to embrace Christianity and with it came up the first Church building in that region. The King of the Congo, whose Kingdom covered the whole of present day Congo, Angola and even the Cameroons, also adopted the Christian faith and became known by a Portuguese name Dom Joao. His traditional pagan subjects objected to the introduction of a

foreign religion and there was a revolt, which was curbed and Christianity remained and prospered.

The Kings of the Congo had an efficient administration and they believed in living in style, marked with grandeur and magnificence. They wore rich clothes, woven with gold and silver threads and donned a long velvet mantlex. Foreign architects made elegant palaces and churches. Marble was lavishly used in these buildings. The people in the Kingdom lived happily, ate rich and wholesome food—rice, meat, fruits and wine—and were sincere and God-fearing.

In the years that followed, the Portuguese interest in the Congo also attracted the Dutch and a Dutch ambassador was accredited to the royal court. These foreigners were not allowed to interfere in the internal State matters, but in 1636 when the provincial ruler of Sogno who was under the sovereignty of the king rose up in revolt and this led the king to invite the Portuguese for assistance. The forces of the king aided by the Portuguese were defeated and a large number of foreigners, mostly Portuguese, were humiliated and mercilessly done to death. This brought to an end the Portuguese influence and even Christianity received a major setback with the destruction of a number of Churches.

The defeat of the King of the Congo did not bring any stability and peace. On the other hand the whole Kingdom including its capital San Salvador, became known for thefts, robberies, executions and large-scale violence. Thus in the 18th century vanished to a large extent the splendour of the Congo. Not much is known in black and white about the later period chieftaincies and potentates.

After a brief period of relative darkness in Central Africa, we come to the study of explorations of Stanley and the creation of the Congo Free State—a historical period that is better known.

A few years before Stanley, began the explorations of David Livingstone in East and Central Africa in the middle of the 19th century, which led to the discovery of the great Lakes—Tanganyika, Nyanza and Nyasa—and the relationship between the Lakes and the principal rivers of the re-

gion—Nile, Congo and Zambezi. Livingstone's mission was that of human sympathy, because he believed that the slave trade carried on by the Arabs in East and Central Africa would not be exterminated until the region was fully opened up to legitimate trade and contact with the outside world.

Stanley, on the other hand, was a different type of explorer. Although he was sent in 1871 to trace Livingstone who was said to be in poor health, he moved about with the mission of an empire-builder in the Congo. Stanley as we have been told was a great soldier, an astute politician and remarkably far-sighted and ambitious. He was born in England, brought up and matured in the U.S., toured extensively in Asia and Africa and served for a period the King Leopold of Belgium.

After his meeting with Livingstone in 1871 and subsequent to the latter's death, Stanley moved to the west of Lake Tanganyika in the Congo region. He was able to elucidate the Congo problem by showing that the rivers west of Lake Tanganyika were tributary to the Congo River and that the Lualaba and the main stream with which it merges could be traced to the Atlantic.

The explorations in West Africa had prepared the way for imperial ambitions and same sort of scramble for territories followed in the case of East and Central Africa. King Leopold of Belgium, although a late comer in this scramble, outwitted the other imperial powers in the case of Congo Basin. He offered a tempting job to Stanley in Brussels. The explorer thus became a private empire builder for the ruthless King. A meeting of geographers and others interested in Central Africa was convened by the Belgian King in Brussels in 1876, which led to the creation of the International Association of the Congo. At the Berlin Conference of 1884 Leopold laid claim to the Congo because of the treaties which Stanley had manipulated with various chiefs of the Congo and the Berlin Conference made one of the most astonishing decisions in history in giving away the large territory to the greedy king. Congo Free State was formed; it was not a colony of the Belgians, but strangely and oddly enough a personal property of the King Leopold.

He ruled the Congo Free State, as a

part of his household from 1885 to 1908, when it was handed over to the Belgian Government as a colony. This rule of 23 years was harsh, merciless and inhuman, but was, of course, commercially productive in making the King a very rich man. Rubber, ivory and mineral wealth was very paying and the agents of Leopold committed the most heinous and ghastly crimes on the Africa population with a view to collect more and more of wealth. The African workers were made to fill quotas and if they failed to bring in the required quota of rubber and ivory, they were shot or mutilated. If an African boy did not satisfy his boss, a hand or foot—sometimes both—were cut off. It is a fact that Africans themselves in the Congo had never used mutilation as a form of punishment.

In the days of the opening up of the African Continent, such abominable stories could not be kept hidden. The world rose in protest. The British Foreign Secretary Sir Edward Grey said in 1908 that the Congo Free State had morally forfeited every right to international recognition.

Leopold had to yield and had to surrender the Congo Free State to the Belgian nation in 1908 as a colony.

These colonies were described at the Berlin Conference as a 'sacred trust of the western civilization.' Was the Belgian colonial policy in keeping with this principle? This question is of vital importance and the answer to this can perhaps be read in the present-day events in the Congo.

(Courtesy: "The Hindustan Times")

Courtesy is really nothing more than a form of friendliness. —**M. Bartos**

Nothing is ever lost by courtesy. It is the cheapest of the pleasures; costs nothing and conveys much. —**Erastus Wiman**

The nearer you come into relation with a person, the more necessary do tact and courtesy become.

—**Oliver Wendell Holmes**

Few people think more than two or three times a year. I have made an international reputation for myself by thinking once or twice a week.

—**George Bernard Shaw**

CHRONOLOGY OF EVENTS IN LAOS

Following is a chronology of events in the Kingdom of Laos since its independence:

1945-46: Following World War II, a succession of Laotian Governments worked towards a settlement with France for independent status.

1947: Laos became a constitutional monarchy. King Sisavang Vong promulgated the Constitution and legislative assembly was elected.

1949: Laos became legally independent, within the French Union. The terms were accepted by the "Free Lao" movement. However, a pro-Communist minority of the "Free Lao" refused to accept the agreement and organized the Pathet Lao (PL) movement. Supported and partially controlled by Vietminh Communists in North Vietnam, the Pathet Lao waged armed resistance against the Laotian Government and the French. Most prominent member was Prince Souphanouvong.

1951: Non-Communist parties a majority in the elections for the legislative assembly. In March, the Communists created a tri-national "Vietnamese-Cambodian-Laos alliance bloc", with the Vietminh Communists reserving "the right to supervise activities in Cambodia and Laos."

1953: In April, the Communist forces from North Vietnam launched the first of three invasions of Laos. Prince Souphanouvong and his Pathet Lao followers announced they had established a "resistance government" in Sam Neua, in the north. By mid-1953, French Union forces had halted the first Communist invasion and limited Vietminh forces to a portion of northern Laos and guerilla pockets in the south. In December, a second invasion was launched.

1954: A third invasion, aimed at the royal capital of Luang Prabang, was launched. By the end of February, all three incursions had been checked by French Union troops.

The Geneva Agreement was signed on July 21, recognizing the independence of the Royal Laotian Government (RLG). It provided that Pathet Lao insurgents be integrated into the national government through national elections scheduled the next year. The International Control Commission (ICC) was established to supervise these arrangements.

1955: In April, the RLG offered the Pathet Lao half the civil offices in two northern provinces as the basis for an integration agreement. No move was made to accept. The Pathet Lao boycotted the August elections and continued to increase the size and arms supply of its forces.

1956: The ICC reaffirmed the right of the RLG to administer the two northern provinces, as provided by the Geneva Agreement, and urged the Pathet Lao to permit the implementation of this right. By mid-1956, the Pathet Lao and Communist Vietminh began extending their subversive network into all 12 provinces of Laos. More than 3,000 trained recruits started work on clandestine missions to organize guerilla units, conduct espionage and agitate against the RLG.

1957: November—After three years of negotiations, the RLG and PL concluded military and political agreements. Militarily, they agreed to the reoccupation of the two northern provinces by the National Army and to the integration of 1,500 Pathet Lao forces in the National Army, the remainder of dissident troops to be discharged. Politically, they agreed to two Cabinet posts for PL members and legal status for the PL's successor political party, the Neo Lao Hak Xat (NLHX). Elections for 20 additional assembly seats were scheduled for March 1958.

1958: January 19—The National Army occupied the two northern provinces. Integrated 1,500 PL troops and demobilized the rest, though only part of the PL's equipment was surrendered. The Coalition Cabinet included Prince Souphanouvong and one other NLHX leader. May 4—Supplementary elections were held, giving the NLHX nine seats. However, the Pathet Lao continued its subversive network of agitation and recruitment. June 13—Alarmed by NLHX activities, the two major moderate parties merged to form the "Rally of the Lao People" (LPR). June 15—A non-party group, the Committee for the Defense of National Interests (CDNI) was formed and supported the LPR programme, giving emphasis to youth activities. July 19 The ICC adjourned after accepting the 1957 settlements as conforming to the Geneva Agreement. July 22—The Coalition Government of Souvanna Phouma resigned and a new Government was installed under Phoui Sananikone. The

two NLHX Ministers were dropped from the new Cabinet, prompting Communist China and North Vietnam to charge that the RLG had refused to adhere to the Geneva Agreement. The RLG replied that there had never been any agreement that NLHX representation in the Cabinet would be permanent. August-December—with the RLG determined to counter subversion, the Communist bloc applied continual pressure to intimidate the RLG. December 14—Communist Vietminh troops entered south-east Laos and established positions in Savannakhet province. The Hanoi regime then sent several notes to the RLG laying claim to the occupied territory.

1959: January 14—The National Assembly granted special power to allow the Premier to revamp his Cabinet. The RLG began stepping up border patrols to combat Vietminh incursions. May 11—Two former Pathet Lao battalions refused to be integrated into the National Army. The Army then demanded that they surrender or be considered mutinous. May 18—One PL battalion surrendered but the other stationed near the border of North Vietnam, escaped into Vietminh territory.

July 2—Ho Chi Minh arrived in Moscow. Two weeks later, the Pathet Lao staged its first armed attack on RLG posts in Sam Neua province, signalling broader attacks by Communist troops all along the border. September 4—The RLG appealed to the United Nations for an emergency force to combat Communist attacks from North Vietnam. September 15—A UN subcommittee, representing Argentina, Japan, Italy and Tunisia, arrived for an on-the-spot investigation. Insurgent activity, though still widespread, gradually slackened during the next three months. December 25—The National Assembly's mandate expired and Premier Sananikone resigned. A caretaker regime was formed.

1960: April 24—The new anti-Communist Social Democratic Party (SPD), sponsored by the CDNI, won a landslide election victory. June 5—An SPD-dominated Government took office. August 9—The Government was overthrown by a leftist paratroop commander, Capt. Kong Lee, who pledged to restore "neutrality" and to negotiate a peace with the Communists. Three weeks later, Prince Souvanna Phouma again became Premier, proclaiming a policy of neutrality between the Pathet

Lao forces and the strongly anti-Communist forces of Gen. Phoumi Nosavan. By October, Souvanna Phouma's appeals for peace between the PL and anti-Communist forces had resulted in a series of negotiations. November 18—Delegates of the NLH and the Phouma regime announced that a Coalition Government would be formed to include Pathet Lao representatives. They said Peking and Hanoi would send goodwill missions to Laos. Meanwhile Pathet Lao forces consolidated their hold in Sam Neua and Phong Saly provinces and infiltrated Vientiane. Gen. Phoumi regrouped his forces near Savannakhet. December 4—Operating under an agreement which had followed establishment of diplomatic relations, the USSR began airlifting oil and food from Hanoi into Laos. December 8—The National Army Commander in Vientiane announced his support for Gen. Phoumi. December 9—Kong Lae forces re-entered Vientiane. Premier Souvanna Phouma, faced by armed conflict, fled to Cambodia. December 10—A military junta assumed control and delegated control to a leftist group under Information Minister, Quinin Pholsena. Within hours, Quinin integrated Kong Lae's paratroopers with Pathet Lao forces. December 11—Soviet howitzers and mortars began to arrive in Vientiane from Hanoi by airlift. December 13—King Savang Vitthanh dismissed the Government and delegated its power to Gen. Phoumi. December 13-16—After a sharp fight, Phoumi's forces captured Vientiane and forced the pro-Communist forces to retreat. Soviet airlifts of military goods continued without intermission. December 31—The RLG informed the United Nations of Soviet interference. It also sent two protest notes to the USSR, both of which were rejected.

1961: January 2—Observers reported that 180 Soviet flights from Hanoi had been identified since December 15. January 14—The National Assembly gave a vote of confidence to Premier Boun Oum's Government. January 21—Britain proposed that they and the USSR work with Prime Minister Nehru of India to reconvene the ICC in Laos. January 22—Mr. Boun Oum requested a SEATO fact-finding commission to be sent to Laos. January 30—President Kennedy, in his State of the Union message, said: "We seek in Laos what we seek in all Asia and, indeed, in all the world—

(Continued on page 528)

Investment Opportunities In India

The rising tempo of economic development in India implies that external resources of a considerable order, besides exports and other foreign exchange earnings, are required to finance the import of machinery and raw materials not indigenously available.

As the tempo will be further accelerated during the Third Plan, with the rate of investment going up by more than 50 per cent over the Second Plan, this fact assumes greater importance.

The phenomenon is not peculiar to India. The process of industrial advancement in all parts of the world has been facilitated by capital from abroad—whether in the form of venture capital brought in by entrepreneurs in search of new fields, or the tribute extracted by colonial powers from territories over which they ruled or, as in recent times, the assistance provided by international institutions and friendly foreign governments.

The remarkable economic rehabilitation and resurgence of many of the West European countries after the last World War has been, in no small measures, due to the massive assistance provided by the United States of America.

Significant Assistance

During the course of the two Plans, India has received significant foreign assistance from friendly countries and international agencies like the World Bank. By the end of 1960, it is estimated that about Rs. 2,100 crores worth of assistance had been authorised for industries, power, transport and other developmental schemes. India is the largest single borrower of the World Bank, a fact indicative, as in the case of financial assistance from other sources, of the creditworthiness and economic stability of this country.

At the same time private foreign entrepreneurs have been gradually turning to India for investment in development projects. The total private foreign investment in India, which was around Rs. 256 crores in 1948, is estimated to have risen to Rs. 593 crores by 1959. Even allowing for considerable investment received from institutional sources, there has been appreciable increase in private foreign investment during the years since independence.

The net inflow of private capital in the three years, 1956 to 1958, was of the order of Rs. 38 crores per year. In the last two years the inflow is estimated to have been considerably larger.

In several important projects like the production of electrical goods, pharmaceuticals, chemicals, drugs and machinery, leading foreign firms are collaborating with their Indian counterparts. Apart from projects of capital participation, there are a very large number of industrial schemes in which collaboration is limited to the supply of technical know-how and of machinery on a credit or deferred payment basis. From the point of view of the strain on foreign exchange resources, it is the former, namely, capital participation, which is preferable.

Considering the extent of foreign capital investment in different parts of the world and the extent to which assistance has been received by India on a government to government basis and from institutional sources, it cannot, however, be denied that the inflow of foreign private capital has not so far been of a large magnitude. Apart from the very vital consideration of saving foreign exchange, foreign investment also brings in its train essential know-how and good management technique.

A New Step

A step which the Government of India have recently taken, with the assistance of the United States, is expected to help a great deal in providing foreign investors with the necessary data and information about investment prospects in India.

The Indian Investment Centre, in New Delhi, recently inaugurated by the Finance Minister, has been designed to promote wider knowledge and understanding in countries with surplus capital of investment opportunities in India and acquaint potential investors with the laws, policies, procedures and prospects relating to investment here.

The Centre will also provide assistance in regard to measures calculated to attract foreign private capital and techniques. Detailed information regarding economic and financial policies of the Government, statistical data on production, market trends, labour and other factors affecting

production will be made available to prospective investors.

Government Policy

The Centre will also try to bring together foreign and Indian investors so that they can work out specific investment projects. It is hoped that the functioning of the Centre will supply a much-needed means of attracting foreign investors to India.

As long back as 1949, the Prime Minister in a statement in Parliament outlined the basic features of Government policy in regard to foreign capital. Government have laid down that foreign capital would be treated on the same footing as Indian enterprise. The remittance of profits, as well as the repatriation of capital, is not restricted.

In the event of compulsory acquisition of any foreign enterprise, it is provided, fair and equitable compensation is to be paid. While the major interest and control of enterprises should be mainly in Indian hands, in cases where there is justification there can be relaxation of this principle.

Several Incentives

The tax incentives provided by Government to new industrial enterprises, in the form of development rebate, exemption from income-tax in the initial stages and other concessions, are available to foreign investors also. Tax exemptions are also given to foreign technicians employed with the approval of Government. Agreements have been concluded with a number of countries, including the U.S.A., U.K., West Germany, Japan and Sweden, for avoiding double taxation on incomes earned in India and avoid taxation of earnings on which tax concessions have been given by the Government of India.

The large scale economic development undertaken in India under the five-year Plans is an important factor which no investor looking for gainful employment of his capital can afford to ignore. A rapidly expanding economy like India's not only offers scope for investment in a variety of industries, particularly heavy industries, but also provides an assurance of an expanding market where the goods produced will be readily absorbed.

CHRONOLOGY OF EVENTS IN LAOS

(Continued from page 526)

freedom for the people and independence for their Government." February 16—The SEATO Secretary-General proposed that ambassadors of member nations in Vientiane constitute an investigating committee. February 19—The King asserted Laos' love of peace and desire for neutrality. He invited a neutral nations commission, from Burma, Cambodia and Malaya, to investigate conditions. March 23—President Kennedy, speaking at a news conference, warned that no one should doubt America's resolution to preserve an independent, neutral Laos. He said hostilities must cease and negotiations begin promptly.

The same day Britain proposed a three-stage plan for peace and preservation of neutrality and independence of Laos: A joint call by Britain and Russia as co-Chairmen of the Geneva Conference of 1954 to the parties concerned to cease-fire; (2) the International Commission headed by India (members Poland and Canada) to meet in New Delhi and immediately report whether cease-fire has really taken place; and (3) a 14-nation conference to produce a long-term settlement of the Laotian crisis.

(Courtesy: The "Thought")

Courtesy costs nothing.

—George Herbert

* * *

And life most sweet, as heart to heart
Speaks kindly when we meet and part.

—Mary Baker Eddy

* * *

Could we see when and where we are
to meet again, we would be more tender
when we bid our friends goodbye. —Ouida

* * *

A great many people think they are
thinking when they are really rearranging
their prejudices. —Edward R. Murrow

* * *

It is the hardest thing in the world to
be a good thinker without being a good
self-examiner. —Anthony A.C. Shaftesbury

* * *

Prejudice is never easy unless it can
pass itself off for reason. —William Hazlitt

* * *

The right thinker and worker does his
best and does the thinking for the ages.

—Mary Baker Eddy

Teachings of

MAHATMA



GANDHI

Q. Gandhiji has attached a negative suffix to Ahimsa. Justify it.

Ans. The words 'ahimsa' and 'non-violence' are seemingly negative in form on account of the negative prefixes 'a' and 'non' respectively. Gandhiji suggests the reason why this highest religion has been defined negatively. Himsa is an inherent necessity for life in the body. Life lives upon life. Ahimsa means an effort to abandon the violence that is inevitable in life. Ahimsa stands for the ultimate deliverance of man from the bondage of the flesh so that he may attain the state in which life is possible without the necessity of a perishable body whose sustenance inevitably involves destruction.

According to Gandhiji, the negative aspect of ahimsa consists in refraining from causing pain or killing any life out of anger or from selfish purpose or with the intention of injuring it. Thus "Ahimsa means avoiding injury to anyone or anything on earth in thought, word or deed."

Ahimsa in its negative sense does not mean merely non-killing. Other and more insidious forms of himsa, Gandhiji points out, are harsh words and harsh judgements (i.e., those intended to hurt), ill-will, anger, spite, cruelty, the torture of men and animals, the starvation, wanton humiliation and oppression of the weak, the killing of their self-respect, etc. According to Gandhiji, "Exploitation is the essence of violence."

Ahimsa is often mistaken for a purely negative doctrine. Such, for example, is the opinion of Bernard Shaw. To Gandhiji Ahimsa is essentially a positive and dynamic force. In its positive and active aspect non-violence means benevolence or love in more comprehensive than the Pauline sense, for ahimsa includes the whole creation and not merely human beings, though St. Paul's definition is good enough for all practical purposes. "Non-violence is therefore in its active form goodwill towards all life."

In short, "ahimsa consists in allowing

others the maxim of convenience at the maximum of inconvenience to us." Again, "every act of injury to a living creature and endorsement of such act by refraining from non-violent effort, whenever possible, to prevent it, is a breach of ahimsa." It thus means the largest love, love even for the evil-doer.

Q. What does Gandhiji mean by Moral Principles? Give the significance of these principles.

Ans. Gandhiji gives us the moral principles which should be observed as vows by mankind in general. Most of these principles, which he laid down in 1916 for being observed in the Satyagraha Ashram, Sabramati, are the maxims of life enjoined for thousands of years by the Hindu shastras as being indispensable for moral growth. The first five of these vows, i.e., satya (truth), ahimsa (non-violence), asteya (non-stealing), aparigraha (non-possession), and brahmacharya (celibacy), are yamas or cardinal restraints. For long years before 1916 Gandhiji had endeavoured to live up to these ideals, and he modified and amplified them in the light of his experience.

Vows, Gandhiji thinks, are a moral discipline absolutely necessary for self-realization. They are a source of strength, for they mean unflinching determination to observe moral laws. In the absence of vows we may be unable to stand against temptations and may bend before discomforts. The refusal to take vows, moreover, is an indication of weakness and betrays a subtle desire for the things to be avoided, he says. Vows should, however, be taken only on points of universally recognised principles. But "the taking of a vow does not mean that we are able to observe it completely from the very beginning, it does mean constant and honest effort in thought, word and deed with a view to its fulfilment. When in doubt about vows, the seeker should interpret them against himself, i.e., in favour of greater restriction.



VOCABULARY TEST

(Few writers are more versatile in the use of English than dramatic critics. Here are 20 words chosen from play reviews. Tick the word you believe is nearest in meaning to the key word. Correct answers are also given below.)

1. **Palpable**—A: weak. B: obvious. C: foolish. D: trembling.
2. **Maudlin**—A: corrupt. B: slavish. C: tearfully sentimental. D: humorous.
3. **Toady**—A: to blacken. B: carry. C: flatter in a fawning fashion. D: tamper with.
4. **Bromidic**—A: trite. B: sarcastic. C: quaint. D: pungent.
5. **Prototype**—A: main headline in a newspaper. B: photographic print. C: model. D: dignitary.
6. **Sombre**—A: serious. B: quiet. C: pallid. D: gloomy.
7. **Fragmentary**—A: disconnected. B: temporary. C: refractory or unruly. D: frail.
8. **Somnolence**—A: wakefulness. B: oppressive drowsiness. C: stupidity. D: sympathy.
9. **Innuendo**—A: wit. B: decrease in volume. C: innocence. D: insinuation.
10. **Spawn**—A: to reject with distaste. B: produce. C: spatter. D: spit out.
11. **Categorical**—A: severely critical. B: uncertain. C: direct and explicit. D: pertaining to teaching.
12. **Ultimate**—A: size. B: final point. C: exaggeration. D: despair.
13. **Intermittent**—A: impatient. B: familiar. C: periodic. D: continuous.
14. **Peculation**—A: theft or embezzlement. B: petty imitation. C: thought or reflection. D: complaint.
15. **Gaucherie**—A: witty remark. B: puzzling statement. C: disappointment. D: awkward or tactless action.
16. **Philanderer**—A: time waster. B: spendthrift. C: male flirt. D: wanderer.
17. **Enmesh**—A: to ensnare. B: crush. C: weave. D: disentangle.
18. **Matriarch**—A: ancient priestess. B: woman who rules a family. C: woman of wealth. D: woman of wisdom.
19. **Legerdemain**—A: sleight of hand. B: nonsense. C: theft. D: telling of legends.

20. **Disintegration**—A: deception. B: loss of interest. C: penetration. D: gradual decay.

ANSWERS

1. **Palpable**—B: Obvious; apparent, manifest; as, **palpable** miscasting.
2. **Maudlin**—C: Tearfully sentimental; over-emotional; as, a **maudlin** scene. A contraction of Mary Magdalen, whom artists often depict with eyes red from weeping.
3. **Toady**—C: To flatter in a fawning fashion; treat servilely; as, "He is always the one to **toady** to the boss."
4. **Bromidic**—A: Trite; commonplace; banal; as **bromidic** dialogue.
5. **Prototype**—C: Model, pattern; original from which a copy is made; as, Shakespeare's Ophelia was the **prototype** of Shaw's heroine."
6. **Sombre**—D: Gloomy; dismal and depressing; as, "The play left the audience in **sombre** mood."
7. **Fragmentary**—A: Disconnected or broken; incomplete; as, a **fragmentary** script.
8. **Somnolence**—B: Oppressive drowsiness or inclination to sleep; as, "The third act was conducive to **somnolence**."
9. **Innuendo**—D: An insinuation; indirect aspersion; as, "The **innuendo** hurt his reputation."
10. **Spawn**—B: To produce; bring forth, especially in great quantities; as, to **spawn** mediocre plays.
11. **Categorical**—C: Direct and explicit; without qualification; as, a **categorical** statement.
12. **Ultimate**—Final point: the last step beyond which there is no other; as, the **ultimate** in wit.
13. **Intermittent**—C: periodic; occurring at intervals; as, **intermittent** flashes of insight.

(Continued on page 539)

However, the slow reader who is in a hurry to improve can try to do actual exercises to improve eye-span.

5. Exercises may help: A slow reader who really wants to make a systematic attack on his weakness should do special exercises.

Take a book and ascertain the number of words on a page. Use this book for subsequent exercises. Read a page; time the reading (with a stop-watch, if possible; if not, a watch with a second-hand) then test the efficiency of the reading.

The maximum practical speed of reading is obviously the speed at which you can take in the material being read and succeed in a test on it—immediately afterwards; otherwise the test is of memory, not of reading speed only.

It is now easy to work out the number of words per minute read, and to try to raise this figure.

The efficient reader has at least two speeds, probably with gradations between them. One speed for entertainment reading such as light novels, magazine articles or travel books, another and slower speed for important study reading or more serious books demanding not only understanding of the words, but thought about the subject-matter.

No Normal person is going to read, say, *An Introduction to Differential Calculus*, or *Intelligence Testing and its Applications*, at the same speed as *Murder on the Channel Steamer*.

Sometimes, indeed, we find that we are trying to read a difficult book too fast, and have to make a deliberate effort to slow our reading speed, so as to be certain that we really understand.

6 Read and read and read: Exercises help the slow reader; techniques may be learned, but, as with all skills, the biggest aid to faster reading is sheer practice.

The slow reader is generally a person who does not read much, who perhaps reads only when he has to. He possibly learned to read late, and therefore has less reading experience than most people. Other people may have discouraged him from reading, for some good reason (such as weak eyesight) or merely because stupid adults think reading is lazy.

The slow reader who wishes to read ~~fast~~ should try to do a great deal of assort-

ed reading. It is reasonable to begin with easy reading matter; ordinary novels, magazines, humorous books, perhaps popular biographies, and history or travel. The first requirement is to find pleasure in reading.

A slow reader should not be intimidated by people who urge him to read only good books. Some of the books often called classics are far more truly satisfying to the experienced reader, than more trivial books. They are remembered, sometimes for years and they do not only pass the time, they nourish the intellect and the heart.

Yet the slow reader may find classics too difficult. Unfamiliar words and the very artistry of the style makes them seem more strenuous reading to the novice.

It may be better to begin with something trivial and easy and, as reading becomes pleasanter and more confident, to go on to classics and to longer books.

My only caution here would be: it is a mistake for the novice to read books written in incorrect English, since this may produce bad habits of speech or writing.

7. Record achievement: I insist that the best way to learn to read faster is to read more. However, the struggling beginner needs every possible encouragement, and may be helped by making records of achievement.

For example, he may like to keep a chart on the wall of improved reading speeds. Even the sight of such modest progress as **Monday, 65 words per minute. Friday, 90 words per minute** (a slow rate on which it is possible to improve enormously) can be encouraging.

To keep a list of books read is another small incentive to perseverance. As the list grows longer, the reader can at least feel that he is trying and has done some constructive work.

Records of this kind prevent pottering. When we try each day to put down something read, or some new reading speed, we do not like to see a blank day on the chart. The student who is subject to fits of laziness may be helped by confiding in a friend. It is one thing to leave a blank day on our chart, but quite another thing to show it to a friend who knows of our good resolutions.

A slow reader can at least double his speed of reading in a few weeks by making a serious effort

Since a double speed of reading obviously halves the time needed for study, this investment brings rewards not only in better and pleasanter study, but also in the field of increased leisure

(By Marjorie Boulton in "Psychologist")

BOYS' CLUBS IN BRITAIN

The future welfare of any nation depends upon its youth, yet thousands of boys with untold possibilities and potentialities are unable to develop them through lack of opportunity or guidance

In Britain, boys' clubs are one of the means used to provide the needed opportunities. Distinctive in their methods they make a valuable contribution to the national life. A club is not solely an institution to keep boys off the streets by providing them with indoor amusements and outdoor athletics. It has a positive end in view, and its amusements and athletics are only a means to that end which is to fit a boy, both physically and morally, for manhood.

The first clubs in Britain were formed during the 1860s when the conditions in city slums were such that boys roamed the neighbourhood in gangs, often lawless, hungry and uncared-for. Men who saw the dangers of this undisciplined, unwanted existence formed clubs to help these boys and give them some of the fun and fitness and comradeship which normal boys need and enjoy.

By 1900, several of the larger cities had formed Federations of clubs, and were able to organise summer camps, sports and tournaments as well as providing medical attention where needed. But it was not until 1926 that with the support of many people, the leading exponents of the club method were able to found the National Association of Boys' Clubs, which rapidly gained Government support, Royal patronage and financial help.

The association now comprises 2,000 individual clubs and has nearly 50 country associations or federations. The policy-making body is a main council of members which includes many eminent supporters.

The National Association believes that its members, though willing to be led by an adult, should also develop qualities of

leadership. Citizenship is the main object of club membership. Leadership needs exercise for its development—a discipline expressed from within which the boys themselves can develop and voice.

The fewer rules there are in a club the better. Ultimately, indeed, there need only be two—to pay a subscription, and to do everything possible to make the club a good place for everyone in it. The real rules are based on an unwritten tradition formed and preserved by its members. No set rules can manufacture character. Character grows by opportunity and influence. The club is what its members are because its tone is set by the boys who have grown up in it.

A club leader, as well as having a natural sympathy for boys, must also have a clear understanding of the aim of the movement and must study how to make his own club not merely a group of boys attached to himself, but a self-governing body with a character of its own, able to nurture the individual characters of its members. The right kind of leader is a man who remembers that he himself, as a boy, gladly followed the lead of men he liked and admired, and that the finest influences in his own life have been those which taught him to judge things for himself, to be critical of catch-words and to resist mass suggestion.

The National Association of Boys' Clubs is specially concerned with training leaders, and maintains a training centre at Nash Court, Ludlow, Shropshire, England, where it arranges courses and conferences on all aspects of boys' club work.

A year's course for full-time leaders and several one-week residential courses for voluntary leaders are arranged in various parts of the country.

The Training Department maintains a mobile training wing, staffed by experienced workers, which is regularly available in counties throughout Britain for demonstrations and lectures on various aspects of boys' club leadership.

INSTITUTES TRAIN FOR RURAL SERVICE

Eleven centres of higher education located in rural areas are attempting today what has been neglected for centuries: provide higher education oriented towards careers of rural service for village youth.

Spread over different parts of the country these centres are outcome of growing realizations that traditional institutions of higher education, too academic in their programmes, and urban in their location and attitudes, can no longer serve the growing needs of people predominantly rural in occupation and outlook.

The eleven Rural Institutes of Higher Education are therefore directed towards the villages. They aim at providing higher education, after secondary stage, to the rural people in their own settings and environments and developing leadership from amongst the rural people themselves. The accent is on training of talented rural youth for specialised jobs in community development and to achieve this, provide with extension and research to make it purposeful and responsive to village needs.

A variety of courses suited to the special needs of rural areas have been evolved. These lead, among others, to the Diploma in Rural Services, Civil and Rural Engineering and Agricultural Science. The curriculum designed is, in each case, an integrated whole of education, research and extension with campus as the base covering a ring of villages as field of operations. Due importance has been given to these Diplomas which have been recognised by 10 State Governments and the Centre. Over 2,250 students have joined these institutions since they were first started in 1956.

The realisation to develop a new pattern of education relevant to rural life and calculated to meet rural needs grew acute with impact of development plans on village life. The new zeal for betterment generated in rural areas needed a new type of community worker. Neither the expansion of traditional education, nor basic schools, could fully fulfil this requirement. A new dimension had to be given to higher education with emphasis on the practical application of knowledge to the realities of rural life. Attention was consequently paid to setting up a chain of rural institutes.

While drawing partly from the Danish Folk School Movement and the American Land Grant College programme, these Institutes have grown primarily out of the early experience of rural education movements in India and exemplify, in fundamentals, the ideas of prominent leaders

including Mahatma Gandhi and Rabindranath Tagore.

With the exception of one, the Rural Institute of Higher Education, Birouli, (Bihar), all the Institutes are privately sponsored.

The concept of Rural Institutes was first mooted by the University Education Commission headed by Dr. S. Radhakrishnan. The idea was caught up and given definitive form by the Shrimali Committee appointed by the Education Ministry in 1954.

When Government at first decided to establish these Institutes it had as many as 23 formal applications all of which had some degree of promise. However, 10 were started in 1956 and one more Institute at Rajpura in Punjab was set up in 1959.

Paucity of funds and the desire to avail of the experience already gained impelled Government to associate the new Institutes with recognised organisations already active in rural education and village service. The resultant selections Statewise gave Bombay 3 Institutes, Madras 2 and U.P., Rajasthan, West Bengal, Bihar and Punjab 1 each.

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GUIDE TO CAREERS:

THE MACHINEMAN (PRINTING)

The contribution of the printing industry in general, and the printing machine in particular, towards the growth of modern civilization is perhaps beyond measure. From very ancient times man has been persistently trying to record his achievements in printed form but very little real progress could be made in printing till about the middle of the 15th century, though it has been known to China for about 2,000 years. As far as it is known to us to-day, printing was done first by carving out an entire page on a wooden block. In this process only the entire page could be printed at a time. Gradually the methods improved and separate types of lead alloy were prepared for making words. Later machines were invented using power to work the printing press and various types of printing machines were manufactured to make printing a mechanical process.

A printing machinemanager is responsible for setting formes or plates which is the type matter assembled and locked in an

iron frame by wooden wedges for printing in place on the printing machine making it ready by running a few samples through the press to ensure that the impression is uniform, and the flow of ink is correct and examining the press sheets from time to time during the run. In big presses he may be assisted by press assistants who work under his directions.

Different types of printing machines work in different ways although the principal processes remain the same. In other words the way impressions are made the mechanical features of machines vary considerably.

The platen Press is the original of all printing presses and is still widely used in small job presses. In its modern construction, it consists of a frame supporting two flat surfaces, the upper one of which is vertical and stationary, the other controlled by an oscillating mechanism which permits it to move upward from a horizontal to a vertical position. This latter surface is known as the platen and it is upon this platen the paper is placed. The type-form is locked on the upper or vertical surface when in operation, the platen swings upward and the paper is pressed against the type-form, making the impression. Platen presses may be hand-fed or may be automatic.

According to a second method, the forme is placed on a flat horizontal bed and the impression is obtained by means of a cylinder which revolves over it. The impression is accordingly taken in a continued succession of narrow strips or contacts and hence lesser force is required to obtain the impression. On account of this fact machines of larger sizes can be worked with higher speed.

The third type of machine is called a rotary machine. In such machines 2 cylinders revolve in contact with each other with paper passing out of them as a continued web. On one of the cylinders, a curved printing plate (forme) is mounted and is inked regularly. The other cylinder acts as an impression surface. This mechanical feature makes it possible to achieve very high speed and accordingly all newspapers, and publications requiring large runs are printed on such machines.

Because of the varieties of presses and the different methods of printing, the pressman's work varies, but on whatever machine he may work he has to do skilled

work. He operates the press, keeps it supplied with paper and ink and sees to it that the printing is done properly. When necessary he cleans the machine, sets it to work and sees that the ink is applied uniformly. He is responsible for its general supervision. When a machine goes out of order due to minor defects, he is required to make necessary repairs and adjustments.

TO QUALIFY as a printing machine-man in earlier days, young boys with a little education, (say of class VII or VIII standard) used to enter as "fly" boys or as learners or apprentices. These boys, over a long period of five or ten years acquire the skill of operating the machine and doing the work. Even now in many small presses this practice of taking learners/apprentices with or without remuneration is fairly common. Recently, facilities for learning this important skilled job in a systematic way, have been provided at a number of institutions which have been established by the Government to train-up persons in this occupation.

The important institutions are:

1. The Northern Regional School of Printing Technology, Allahabad.
2. The School of Printing Technology Calcutta.
3. The Regional School of Printing, Madras.
4. The School of Printing Technology, Bombay.

Among the subjects included in the printing courses in these institutions, letter-press printing is considered a very important one. There are two courses of studies, one is a licentiate course in printing and graphic arts which takes three years followed by one year's practical training in a recognised printing press. The other is a junior certificate course in printing, the latter being a part-time evening course. Those who have passed their school final (or its equivalent) examination and are between 15 and 18 years of age are eligible for admission to the licentiate course. For admission to the part-time junior certificate course, only sponsored apprentices who are already employed in industry are eligible. The session begins normally in June. More schools of this standard are likely to be opened. Besides these, there are other local institutions which offer longer or

shorter courses for training in the printing which may be known to your Employment Officer. Generally such places offer preliminary training in letter-press printing and admit young people with middle school education. The Shri Jayachamarajendra Occupational Institute at Bangalore has a three years diploma in printing technology.

FURTHER TRAINING facilities generally exist in large printing presses, private and Government, where different types of machines operate. It is, however, difficult to get opportunity to learn the occupation in these presses as many of them only train people for whom employment opportunities exist in the presses themselves. A printing research institute is likely to be set up at Bombay very shortly and qualified pressman may have opportunities of getting further training there. Qualifications for admission etc., in this institute are not yet known.

PERSONAL QUALITIES for the printing trade are good health, good eye-sight, active habits and a careful nature. A printer is usually required to work while standing. He is also required to move about constantly. All the time he is in the printing room, he is required to see that his machine is working smoothly and well. He also ensures that the impression on the paper is uniform. The machineman operating a multicolour printing machine must be free from any colour blindness. The Operator who works on a fast machine like the automatic machine, which gives 2,500 impressions in an hour must of necessity be a man of active habits. He is required to adjust the machine very quickly, control the flow of ink and ensure the smooth supply of paper. Finally he should not mind if his clothes get dirty with grease, ink etc. A machineman always works in a busy and noisy room where various types of machines are working. He is exposed to all sorts of odours of ink, paper, cleaning fluids and other chemicals that are used there. If he is not a man of careful nature he may meet with accidents as the machines work at high speeds. Normally he has to work for 8 hours for six days and he is governed by the 1948 Labour Act. Some workers are required to work on shifts. Persons working in newspapers are generally required to work at night shifts. They should be also reliable and ~~as quite often they print confiden-~~

tial or secret things which should not be divulged to the public.

ENTRY into this occupation is generally as earner or apprentice, in a press. For apprenticeship in Government of India Presses advertisements are issued in newspapers inviting applications giving details of qualifications etc. In private presses learners are generally introduced to the authorities by the workers under whom learners are put. Sometimes skilled workers are also recruited through newspaper advertisements or through Employment Exchanges.

OPENINGS for printing machineman exist in all the Government of India Presses, State Government Press, National and local newspaper printing presses and private presses owned by universities, institutions etc., publishing houses and small presses for doing job work. There are about 25,000 presses in India though about 60 per cent of them function more or less as small industry units.

EMPLOYMENT OUTLOOK: There can be no doubt that literacy will increase and education will spread if our country is to march forward. It is very likely that the printing industry will develop faster than many other industries. During the Third Five Year Plan, it is proposed to introduce compulsory free primary education for all children between 6 and 11 years of age and that in itself will increase the number of those who read news considerably. It is true that import restrictions have for the time being adversely affected the expansion of the printing industry. Nevertheless, as the country progresses, more printed materials will be required and more opportunities for printer and machinemen will develop. It can be reasonably expected that all trained machinemen who pass out of the schools of printing technology and other institutions will be absorbed by this expanding industry.

FOR FURTHER INFORMATION on training facilities and employment opportunities for machinemen and pressmen contact may please be made with:

1. The Regional Schools of Printing at Allahabad, Calcutta, Madras & Bombay.
2. State Government Presses.
3. Government of India Presses, and
4. Employment Exchanges.

(Courtesy: 'Union Ministry of L. & E.')

EDUCATIONAL FORUM

SCHEME TO DEVELOP REGIONAL LANGUAGES

Dr. K. L. Shrimali, Union Minister of Education, gave details in the Lok Sabha on April 13 of a University Grants Commission Scheme for helping in the development of regional languages. According to the Scheme two prizes for the study of regional languages, one of the value of Rs. 500 and the other of Rs. 250, were to be awarded on the results of a competitive examination at each of the Indian Universities.

The Minister said that in addition to the cash award each candidate who secured a prize would be permitted to tour for one month, the area of the language in which he secured the prize.

The examination, which will be of the Matriculation standard, will be held every year for the following groups and for the following languages mentioned below: **Sanskrit Group:** Group (1) Assamese; Bengali; Gujarati; Marathi and Oriya; Group (2) Kashmiri; Punjabi; Urdu and Hindi. **Dravidian Group:** Tamil; Telugu; Malayalam and Kannada.

The Scheme envisaged that if Hindi was taught as a compulsory language at any stage in the educational system in the area of the university concerned it would not be included in the list for the purposes of this competition.

The Minister said that all students on the rolls of the university, including affiliated colleges, who were not more than 20 years of age, would be eligible to take the examination.

UGC DISFAVOURS TEACHING MUSIC

The University Grants Commission disfavours music as an optional subject in the university curriculum.

Rejecting Delhi University's proposal for making music an optional subject for the B.A. pass course, the Commission has stated that the teaching of music and fine arts at the university stage needs further consideration to ensure that this will not be merely a duplication of work being done in professional schools.

The Commission made inquiries from various universities regarding teaching arrangements for music. Excepting those of Banaras, Baroda, Delhi and Indra Kala Sangeet Vishwavidyala, Khairagarh, no university has a degree course in music.

Only three of them—Banaras, Baroda and Khairagarh—have arrangements for an M.A. course in music. Delhi has introduced a B.A. (Hons.) course in Hindustani music from 1960-61.

Six universities—Agra, Andhra, Madras, Poona, Banaras Sanskrit University and Visva Bharati—have a diploma course in music. Music is also allowed as an optional subject in the degree course at Andhra and Poona Universities.

The provision for music as an optional subject in the pre-university course and for the first degree examination exists at nine universities—Allahabad, Andhra, Karnataka, Mysore, Rajasthan, Saugor, SNDT, Sri Venkateswara and Vikram.

Aligarh, Bombay, Gauhati, Gujarat, Jadavpur, Lucknow, Marathwada and Osmania Universities and Sardar Vallabhbhai Vidyapith have no provision for teaching music. Osmania University has decided to institute a three-year degree course in music and Sri Venkateswara University, Tirupati, is also keen to develop a faculty of fine arts. Madras has got a Sangeet Shiromani course in addition to the diploma course.

After its study, the Commission came to the conclusion that in many cases the subject "tends to be treated as a professional training in course with very little intellectual content and some of the teachers are persons with very little general education. University departments then become indistinguishable from music and arts schools run on commercial lines."

TRAINING IN PAINTING AND SCULPTURE

The Academy of Fine Arts, Perugia, Italy, will conduct summer courses in painting and sculpture for foreign students commencing from July 1 this year.

The courses, which will last three months, will also include a study of other disciplines such as theories of art, history of theatre as well as of various techniques of engraving, ceramics, fresco and working on marble and stone.

While the lessons will be in Italian language, teacher-interpreters will translate them for the benefit of the students.

The courses will be open to foreign citizens above 18 years of age.

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COMPETITION FOR BOOKS FOR NEO-LITERATES

The Government of India have extended till September 15, 1961, the date for submission of entries in the III Competition for Production of Books and Manuscripts for Neo-literates and Workers in the Community Development Block areas.

The last date for submission of entries fixed earlier was June 30, 1961.

Twenty-five prizes of Rs. 1,000/- each will be given to Indian authors of the best books or manuscripts entered for this competition.

The titles for books listed under the Competition are: Social Reformers of India, Saints of India, Great Women of India, India's Festivals, India's Folk-lore, Leaders of India's Freedom Movement, Our Neighbours, Religions of India, Stars and Planets, Great Scientists of India, Great Authors of India, Children's Games, India's Cultural Heritage, Heroes of Indian History, Our Epics, Places of Pilgrimage in India, Our Tribal People, Our National Anthem, Prevention of Common Diseases, Indian Handicrafts, India's Rivers, The Story of Our Flag, Principal Cities of India and Folk Dances of India.

Books and manuscripts can be submitted in any Indian language. They should be in a simple style and have a literary appeal to neo-literate adults.

The manuscript should normally be of about 80 pages or 20,000 words approximately. The books should be adequately illustrated.

Under the scheme, authors and publishers will transfer the copyright of the prize-winning book to the Government of India.

Only books and manuscripts publish-

ed after January 1, 1959, will be entertained for the Competition.

One copy of each book or manuscript, accompanied by four copies of its English translation, should be submitted to the Special Officer (Literature), S.W. II Section, Union Ministry of Education, New Delhi.

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APPOINTMENTS IN SCIENTISTS' POOL

Dr. M. M. Das, Union Deputy Minister of Scientific Research and Cultural Affairs, told the Rajya Sabha on April 24, that 49 scientists had accepted offers for temporary placement in the Pool of Scientists in 1959.

Dr. Das said that selection to the Scientists' Pool was done by the Union Public Service Commission, which was assisted by a Special Recruitment Board. Initially, applications were called by public advertisement, but as this entailed some delay, steps had now been taken to ensure that the selection of qualified scientists to the Pool is made on a continuous basis and scientists and technologists with high qualifications do not have to wait unduly.

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21 NEW MEDICAL COLLEGES

State Governments have tentatively planned to open 21 new Medical Colleges during the Third Five Year Plan. The final number would be known after the revised States' plans were received. This was stated by the Union Minister for Health, Shri Karmarkar in New Delhi at a meeting on March 14 of the Informal Consultative Committee of Parliament of his Ministry.

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5,000 MORE SECONDARY SCHOOLS

Primary education in the country will be universal and compulsory by 1965-66, and there will be a school within easy walking distance from the home of every child. This is revealed in the report of the Ministry of Education for the year 1960-61. The report says that the number of secondary schools is expected to rise from 14,000 at the end of the Second Plan to about 19,000 by the end of the Third Plan. This will be double the number of such schools at the end of the First Plan. There is a proposal to start more rural institutes in the country. There are already 11 rural institutes in 8 States.

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

CULTURAL AGREEMENT BETWEEN INDIA AND NORWAY

A Cultural Agreement between India and Norway was signed on April 19, 1961, in Oslo by the Ambassador of India, Shri V. M. M. Nair, and the Norwegian Minister of Foreign Affairs, Mr. Halvard Lange.

The Agreement provides for the promotion of the fullest possible understanding in the respective countries of the intellectual, artistic, scientific, technical and industrial achievements and the way of life of the other country.

The various means of implementing the Agreement are stated in seven articles and comprise, *inter alia*, exchange of representatives and delegations in the fields of education, science, technology, culture and arts, exchange and translation of cultural material, organisation of scientific and art exhibitions, theatrical and other cultural performances, facilities of study, training and specialisation in the institutions of the other country.

This Agreement is the 13th Cultural Agreement signed by India since 1951. The earlier Agreements were signed with Turkey, Iraq, Indonesia, Japan, Iran, Poland, Rumania, U.A.R., U.S.S.R., Yugoslavia, Czechoslovakia and Mongolia.

ESTIMATES OF NATIONAL INCOME

In 1959-60 India's National Income was Rs. 11,760 crores calculated at 1948-49 prices. This was Rs. 110 crores more than the 1958-59 figure and Rs. 1,280 crores more than the figure for 1955-56 at the beginning of the second Five-Year Plan. This is revealed in a paper on National Income released by the Central Statistical Organisation.

The per capita income calculated at 1948-49 prices has been estimated at Rs. 291.6 in 1959-60, Rs. 292.6 in 1958-59 and Rs. 273.6 in 1955-56.

Other figures given in the paper show a 2 per cent rise in National income in real terms during the first four years of

the Second Plan period. During the entire First Plan period, there was 18.4 per cent rise in national income in real terms.

FIRST INDIAN TO REACH SOUTH POLE

The first Indian to reach the South Pole, 32-year-old Giriraj Singh Sirohi from Bulandshahr in U.P. was in Delhi on Saturday, April 22, on his way back to the U.S.A., where he is a research worker in California University, Los Angeles.

He was a member of a scientific expedition, sponsored by the National Science Foundation of the USA and he and 10 other members of the expedition arrived at the Pole on December 5, spending 65 days in a temperature of 40 degrees below freezing point.

The only other Indian to attempt to get the South Pole was Lt. Ram Charan of the Indian Navy, who went up to McMurdo Sound, about 800 miles from the geographical pole, early this year. He was later killed in a motorcycle accident in Delhi.

Speaking of his experience, Mr. Sirohi said: "It was thrilling." He was a little afraid, when he joined the expedition, that the low temperatures to be encountered may be unbearable, but he stood the freezing well.

Mr. Sirohi said that the expedition, organized to conduct some experiments on plants and animals, took six months to make the trip and cost the Foundation nearly \$4 million (nearly Rs. 1.2 crores).

The sun never set all the time they were at the Pole, he said. The glare was such that they had to wear goggles all the time; but they enjoyed working under such strange conditions.

Mr. Sirohi was already a Ph.D. from Delhi University when he went to California, where he obtained a doctorate in another subject.

SPACE LANGUAGE CALLED "LINCOS"

One problem that will have to be overcome if and when man does set foot on

other planets is that of conversing with other beings on the planet—if they exist.

It's a bit of a poser. But scientists who have been working on it now regard space talk as more than possible.

They have invented an amazing new language—called 'Lincos'—that will enable spacemen to hold a conversation with any intelligent being they encounter.

It is based on radio 'dot-dash' signals and can be worked out mathematically.

Says Prof. Hans Freudenthal, of Utrecht University, Holland, who invented the language: "Archaeologists soon discover how to translate unknown dead languages inscribed in tombs.

"Imagine how much easier it would be to understand a language designed for translation."

American scientists are certain the residents of outer space will understand the signals. So much so that they are planning to focus a radio telescope in space to pick up signals beamed back to earth.

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COMMONWEALTH PARLIAMENTARY COURSE

Thirtytwo Commonwealth parliamentarians from about as many different countries, including India, had recently attended a course in London organized by the United Kingdom branch of the Commonwealth Parliamentary Association. During their stay in the United Kingdom the delegates were also to be guests of the Northern Ireland branch of the association for 11 days.

The course, which lasted almost one month, opened on April 19 with an address by the Earl of Munster, deputy chairman of the United Kingdom branch of the Commonwealth Parliamentary Association. On May 4—the day before the delegates flew to Northern Ireland—the course had a "brains trust" session. The delegates were in Northern Ireland from May 5 to 17.

The objects of the Commonwealth Parliamentary Association, which was founded in 1911, are to facilitate the exchange of visits and information between parliamentary representatives in various parts of the Commonwealth. The governing body of the association is a general council, consisting of over 20 members from various parts of the Commonwealth,

which meets once a year in one of the Commonwealth capitals.

An important activity of the association is the organization of conferences which take place every other year. These are attended by delegates from every branch, meeting in one of the Commonwealth capitals.

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THE BIGGEST PAINTING

In a basement, artist Louis Duffy, of Oakwood, North London, is painting the biggest picture Britain has seen for many years. It will be 250 feet long and will depict the history of road transport from 5000 B.C. to the present time.

When finished, it will stretch the full length of a gallery in the Science Museum in London.

The largest English painting was The Panorama done by Edward Thomas Parris 150 years ago. It covered more than an acre of canvas and showed, in circular form everything that could be seen from the top of St Paul's Cathedral.

But it was a tiny production compared with the picture painted by an American, John Banyard between 1840 and 1846.

For several years Banyard served on boats that sailed the Mississippi. He made sketches of every twist and turn of the river its scenery, and the village along its banks.

Finally, he bought a bale of linen, stretched it out on scaffolding by the river and began painting.

Banyard added other bales as he needed them and finally produced a picture about two and a half miles long.

He set it up in a field surrounded by a wire fence and charged visitors an entrance fee. Every three quarters of a mile he had a snack bar. The exhibit was so popular that in a few years he had made a small fortune.

Unfortunately Banyard could not keep the painting under cover, and at nights swarms of rats came up from the river and gnawed at the picture.

In an effort to keep his marathon work intact, the artist used cats, dogs and traps. He failed.

The picture was eventually taken away by the sanitary authorities just before Banyard died in 1891.

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DESTROYER TO BE BUILT IN INDIA

For the first time a destroyer is to be built in India for the Indian Navy.

The destroyer will be constructed at an estimated cost of Rs. 6.4 crores at Bombay's Mezagon Dock, which was taken over by the Defence Ministry last year.

Firm orders have been placed with the Mezagon Dock Company by the Navy for the construction of a 500-ton waterboat and two inshore mine-sweepers.

Since the Government took over this and the Garden Reach Workshops at Calcutta, a big building programme of vessels of varying types has been launched, in addition to repairing and other facilities extended to commercial shipping.

According to the 1960-61 report of the Defence Ministry, a cargo-cum-passenger vessel was constructed for the administration of Andaman and Nicobar Islands since the acquisition of the Mezagon Dock. Dry docking was provided for seven ocean-going marine ships in the same dock.

Capacity for production of stationary diesel engines of 6 to 20 horse power is also available at the dock.

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COMMUNITY DEVELOPMENT PROGRAMME

The Community Development Department, in its report for 1960-61, says that the acceptance of the concept of Panchayati Raj throughout the country has been an outstanding achievement of the department. Six States have now Panchayati Raj. They are Andhra Pradesh, Madras, Mysore, Rajasthan, Orissa and Assam. The report says the community development programme now covers over 20 crore people and more than 3,68,000 villages. There are 3,110 community development blocks and 490 pre-extension blocks in the country. An all-out effort was made during the year to raise farm production, mobilise people's participation and extend training facilities to community development personnel. Government spent over Rs. 137 crores and people contributed more than Rs. 63 crores for community development work during the first four years of the Second Plan. Government's share during the last year of the Plan is estimated at nearly Rs. 51.5 crores.

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EUROPE'S FIVE "MINISTATES"

Certainly, there is something particularly attractive about things which come in small sizes, and this was never truer than in these days of "megalomonstrosities." It is perhaps for this reason that many a traveller surfeited with traipsing through the cities, towns, museums, castles, and battle-fields of Western Europe's larger nations, turns with a sigh of satisfaction toward Europe's five "ministates".

Andorra: Alone and faraway of the apex of the Pyrenees, a land of green valleys, cool streams, snowbound passes, Andorra's sovereignty is a mysterious thing, divided among French, Spaniards, and the Andorrans themselves. Still the world's classic haunt of smuggling, it beautifully meets one's concept of a fairy-tale land.

Monaco: Best known of Europe's little lands because of its charming location on the Riviera, and its equally charming young Princess Grace, Monaco has a remarkably mild climate, magnificent scenery, and more fashionably elegant visitors than all the other ministates put together.

Liechtenstein: Alpine pure and simple, this country combines the best of Austria and Switzerland, but without the former's recent tragic history and the latter's concentration on tourism. Now increasingly known as a tax refuge for those of the world's wealthy who can meet its nationality requirements.

San Marino: The only free, independent country in the world ever to vote a Communist government into power of its own free will, San Marino sits, a mass of rugged towers, walls and cattles, atop a gigantic upthrust of rock in north-central Italy. A wonderful source of colourful postage stamps, San Marino in 1957 ended Communist rule after 12 years.

Luxembourg: The only ministate which plays a serious economic role in the world today. An important steel producer, it is a member of Western Europe's Common Market. A grand duchy, Luxembourg is also a land of well-kept farms and prosperous farmers, its culture a pleasing mixture of French and German influences.

Readers' VIEWS

INDIA'S MISSION AND ITS IMPLEMENTATION

Sir,

It is the age of socialism. Most of the countries have directly or indirectly been influenced by it. Even those countries which side with the capitalist bloc have not remained untouched by it. The greatest proof of it is that their labourers are enjoying a better standard of living than they were doing a decade ago. So far as India is concerned, it has deeply been influenced by it. Those who are today at the helm of affairs were influenced by it as early as they were young. That is why socialist pattern of society has been declared as the mission of India. Before we proceed further, we must understand the difference between socialist pattern of society and socialistic society. Our Government does not aim at complete socialism. If complete socialism were the mission of India, there would not have been private and public sectors. A society based upon socialist pattern approximates a socialistic society.

It is a matter of great regret that the efforts that are made to materialise this mission often prove abortive. The gulf between the rich and the poor has been and is continuously widening.

There are so many factors that are responsible for this State of affairs.

The taxation policy of the Government is fundamentally wrong because its ultimate pressure falls upon the rank and file that are steeped in poverty. So far as capitalists are concerned, they have so many devices at their disposal. They employ them. Their employment results in the enhancement of their profits and the exploitation of masses. So long as our Government does not devise various means to check it, all the efforts to bring about the desired result will not fully fructify. Taxation policy, of course, needs revision.

Today, press has a special responsibility to shoulder. It should do its level best to foster all the progressive forces of our society. Here we are again confronted with a great obstacle. Most of the

papers are in the hands of capitalists. Most of them want to throttle the growth of progressive forces because they have got their vested interests and they want to safeguard them at any cost. Both the Government and the public should pay attention towards it.

One who wants to understand Indian politics must know its caste system. Untouchability is an integral part of it. Caste system is based on the exploitation of one class by another. Some are considered superior and some inferior. It plays a determining role in various fields. So long as it is not wiped out altogether the desired society cannot be established. Law will not suffice for this purpose. Popular awakening is one of the main requisites for it. The Government will have to devise various means to do away with it. Madhya Pradesh Government has recently decided that those upper caste Hindus who agree to work as sweepers will get an extra allowance of Rs. 90 per month. This step is really worthy to be praised.

One thing that often rankles in the mind is our planning modelled on the Russian pattern. It is not in complete consonance with the conditions that are prevailing in our country. This has also retarded our pilgrimage towards our mission.

(Hamidul Hasan, Jhansi)

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INDIAN FILMS

Sir,

Even the strictest martinets have at times, though sheepishly, taken off their hats to the classic hits exhibited on the Indian screen. But much chagringly, they are a mere flash in the pan. Barring these sporadic artistic arabesques, the rest are blots on the fair escutcheon of Minerva, the goddess of art. Then the so-called social reformers would take up cudgles and ruthlessly hag the younger generations to pieces for their obscene conduct. 'Flies Flatten on Filth', rightly remarked G. B. Shaw. No young mind can remain immune from all the vicinity, for all its inquisitiveness.

There is no denying the fact that the

motion pictures transcend the language barrier and attempt at mingling the divergent cultures in the world. But, would pictures like 'Kali Topi Lal Roomal', 'Tel Malish', 'Boot Polish', 'Kala Bazar', only a few to name, ever receive a word of admiration? They would rather receive more kicks than half pence.

I fully corroborate the cause espoused by Mr. K. M. Munshi—the dauntless crusader against such pictures as they corrupt the tender hearts, lower their morale and depict nothing but make-believe realms of romance and love. Pictures like 'Pather Panchali', 'Jagte Raho', 'Seema' do represent the spirit of art.

Why should we not have more pictures of this type? But this can be possible only if the production of cheap thrillers, vulgar comedies, jejune tragedies and pseudo-social dramas is stemmed altogether. They are precipitous wastage of time, money and raw material. The plan of complete stopping of such productions can be executed through a sub-committee that functions side by side with the existing Film Censor Board. The committee should scrutinize stories and allow the producers to take them to the floor only when they confirm to a certain norm—of being educationally informative, morally edifying and emotionally sound. Such a step, if countenanced earnestly, will not only purge the fans' minds of the perverted values of life but also give a new fillip to many a sensible producer to launch new experiments in the field of art.

(Kishori Lal Sikka, Shahkot)

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GANDHIJEE'S PHILOSOPHY—A SYNTHESIS

Sir,

It is wrong to assume that Gandhijee was wholly original in his ideas and thoughts which he propounded and practised in life. He, like others, was influenced by one or the other individual or group. It is true that he did not remain under one influence throughout his life. Whatever came to him, he tried to analyse it and then accepted or rejected it.

The Quakers did throw some influence on Gandhijee's life and thought. They believed that each man's life is guided by an "Inner Light". Gandhijee too believed in it but with a different name. Gandhijee gave this "Inner Light" the name of "Inner Voice" or "Small Voice".

Gandhijee also came under the influence of the Donkhobors, a Russian Peace Sect, who observe ascetic rules of conduct, are strict vegetarians and are opposed to all forms of violence and deny totally the allegiance to any authority that is not divine. Gandhijee too preached and practised non-violence and truth throughout his life.

Gandhijee had also been influenced by Thoreau. He was the first to use the term of Civil Disobedience. He also believed "There should be maximum of cooperation with all people and institutions when they lead towards good and we should bluntly refuse to cooperate with any one who wants to lead us towards evil" Gandhijee too, preached the same.

Ruskin also helped in shaping Gandhijee's views. To Ruskin, the good of the individual is contained in the good of all. Gandhijee held the same belief.

Both of them preached the supremacy of the spirit and believed firmly in the nobleness and sublimeness of human nature. Both regarded character as more important and significant than intelligence and bookish knowledge. Both of them tried desperately to spiritualise politics and economics. Both of them emphasised the priority of social regeneration to mere political reform and achievement of political independence.

It is true to a greater extent that Gandhijee's views are more akin to those of Tolstoy, than to those of Ruskin. Tolstoy's philosophy is commonly called "Christian Anarchism". Tolstoy was against violence and was in favour of love, non-resistance and non-cooperation. He laid great stress on moral regeneration of the individual. Gandhijee was greatly influenced by Tolstoy and is generally considered the "Disciple of Tolstoy". They were no doubt the two great modern exponents of non-violence.

To conclude, we may say, "Gandhijee's philosophy is a synthesis of all the teachings of sages from every corner of the globe, to which he applied his own interpretation and a pyramid, in which those teachings and doctrines met on equal terms—from which emerged out a new ray of hope, that can save and prevent the tormented humanity from destruction. He drew his inspiration from different wells of

thought and wisdom and built up quite a new and unique philosophy.

(Kultar Singh, Kanpur)

APPEAL TO POLITICAL PARTIES

Sir,

Politics is a "dirty" game. But we should not make it "very dirty". The present trends in the political field of our country have gone to such an extent that a man in the street feels that our country is heading towards catastrophe. So it is high time that something should be done before it is too late.

In the interest of our nation all the leaders of our political parties should come to an agreement on the following points:

They should not blame one another and should put a full stop to their moonshine. They should talk less and work hard for the betterment of the masses and the country as a whole. Once a government is formed by one party, other parties should not criticize the government policies for criticism's sake, but give constructive suggestions. As far as possible, other parties should identify themselves with the party in power.

They should not organize demonstrations and strikes to exhibit their displeasure and unwillingness. They must represent their cases to government instead. They must infuse love and fellow feeling into the minds of the people and not hatred and enmity.

They should make it a point to solve all their differences and problems by peaceful means. They should not resort to violence of any kind under any circumstances. Nations' interest should be first and party's interest should come next, that should be the motto.

All the parties irrespective of their political ideologies should not forget that they are the sons of the same soil and should find their ultimate joy in mental and emotional surrender to the personality of their nation.

It is only by cooperation and not by competition that the miseries of our masses can be eradicated.

(Dhananjay Patro, Jagtpur)

MATCHLESS PUBLICATION

Sir, I have always felt pleasure in reading your monthly magazine "Careers And Courses". All topics, current and im-

portant, are taken up. The speedy progress which it enables the competitors to make in different examinations is worth noticing. Truly, it solves the problems of indecision, lack of energy, aimlessness and mental tiredness as indicated on the back cover of your magazine. I wish that this magazine becomes more and more familiar to the youngmen and in particular among those preparing for competitive examinations. (Thakur Dileep Singh, Hyderabad)

INFORMATIVE MAGAZINE

Sir, I am one of the regular subscribers of your esteemed English Monthly the "Careers And Courses". I could not but express my hearty thanks to the Journal in question. (N. C. Das, Tura)

QUESTION BOX

Sir,

In the April issue of your magazine you have answered the question 'Why and how any number to the power zero equals unity' in the column, Question Box. I however feel that the following will be a much simpler proof:

We know that $x^m x^n = x^{m+n}$

Putting $n = 0$, $x^m x^0 = x^{m+0}$

now, dividing this by x^m we get

$$x^0 = x^m / x^m = 1.$$

Hence the proof

(D. K. Rao, New Delhi)

(Yes, of course, your proof is quite simple but nonetheless our proof is more comprehensive, and it can be made more comprehensive by introducing the idea of limits. Anyhow, we have avoided it. We may also point out that proceeding on your lines we can easily formulate a still simpler proof as follows:

$$x^0 = x^{1-1} = x/x \text{ (rule of indices)}$$

$$= 1. \quad \text{Ed C & C.)}$$

CORRIGENDUM

Sir, a mistake has crept in on page 389 of the April 1961 issue of your magazine. The seven man Cabinet headed by Sri Binodanand Jha was sworn in in Patna (Bihar) and not in Poona (Bombay). Kindly confirm.

(Syed S. Haque, Patna)

(Yes, you are right. The mistake is regretted—Ed. C. & C.)

FILM WORLD

"OSCAR" AWARDS

Elizabeth Taylor received America's Academy of Motion Picture Arts and Science Award as the best actress of the year for her part in "Butterfield 8."

The "Oscar" for the best actor went to Burt Lancaster, who played the title role in "Elmer Gantry."

"The Apartment" was adjudged the best film of the year.

Britain's Peter Ustinov, won an award for the best supporting actor for his part in "Spartacus." The best supporting actress award went to American Shirley Jones, for her performance in "Elmer Gantry."

Danny Kaye accepted an honorary award for British-born Stan Laurel, surviving member of the Laurel and Hardy comedy team, explaining that Laurel was not well enough to appear.

The British film, "Giuseppina," produced by Lester Schoenfeld Films, won an "Oscar" as the best short documentary.

Walt Disney's "The Horse With the Flying Tail," was chosen the best feature-length documentary.

"The Time Machine," based on the H. G. Wells' novel of the far future, won in the best special effects category.

The special Jean Hersholt Humanitarian Award went to Producer Sol Lesser.

The Swedish film, "The Virgin Spring," directed by Ingmar Bergman, won the "Oscar" as the best foreign-language picture.

A special award was made to lanky star Gary Cooper for his contributions to film history.

"The Apartment" set this year's record by winning five awards—for best film, best direction, best screen-play written directly for the screen, best black and white art direction and best film editing. Last year, "Ben-Hur" set the record with 11 awards.

About 25,000 people had crowded into the auditorium for the thirty-third annual "Oscar" presentation held outside Hollywood for the first time.

BRITISH FILM ACADEMY AWARDS

The British Film Academy Awards for 1960 were announced in London recently. They are: Best film "from any source"; "The Apartment"; best British film: "Saturday Night and Sunday Morning"; best British actress; Rachel Roberts in "Saturday Night and Sunday Morning"; best British actor: Peter Finch in "The Trials of Oscar Wilde."

Best foreign actress: Shirley MacLaine in "The Apartment"; best foreign actor; Jack Lemmon in "The Apartment"; most promising newcomer to leading film roles: Albert Finney in "Saturday Night and Sunday Morning"; best British screenplay: "The Angry Silence" by Bryan Forbes; United Nations Award: "Hiroshima Mon Amour"; best short film "High Journey"; best animated film "Universe"; best specialised film: "Dispute".

There was no award this year for the best feature-length film documentary.

ROLE OF FILM INSTITUTE

Dr. B. V. Keskar, Union Minister for Information and Broadcasting, stated in a reply to a supplementary in the Lok Sabha that the main aim of the Film Institute was to provide the film industry with efficient technicians. The trained personnel could also be absorbed in the Films Division of the Government of India, he said.

Replying to another supplementary, Dr. Keskar said that stipends would be given to some first class students.

Asked if the Film Institute would help in the production of films with a good moral tone, Dr. Keskar replied that it was not possible for the Film Institute to influence the film industry towards producing pictures with a good moral tone. The production of good films by the film industry was dependent on public opinion, the Minister said.

Dr. Keskar refuted the charge that undue delay had been made in the setting up of the Film Institute; rather it was being established at the earliest, he said.

The Film Institute had to take the help of many foreign film institutes for framing the syllabus. All preliminary work in

connection with the starting of regular courses, such as recruitment of teaching staff, drawing up of syllabus, structural changes in the building and so on was in progress, Dr. Keskar stated.

FOREIGN FILMS IN INDIA

In a written reply to a question in the Lok Sabha on March 21, Dr. B. V. Keskar, Minister of Information and Broadcasting, said statistics relating to import of films were maintained in footage and not in numbers. It was, therefore, not possible to furnish precise information about the number of films imported in any particular year. However, the number of imported films of all categories certified for public exhibition by the Board of Film Censors, under the Cinematograph Act, 1952, was 1640 in 1959-60 and 1420 in 1960-61 (up to February, 1961).

Foreign films were imported normally on a rental basis. The actual amount of remittance on rentals made on such films from April 1959 to December 1960, amounted to Rs. 51.7 lakhs. It was not, however, possible to state how much of this amount represented the earnings from films certified during 1959-60 and 1960-61. A good portion of the rentals was blocked in India.

No specific complaints had been received to the effect that some of the foreign films were obscene and detrimental to the ethos of the country, although there had been expressions of opinion which had come to notice from time to time. Films were examined by the Board of Film Censors before they were certified for public exhibition, under the Cinematograph Act, 1952.

The Government had also issued directions to the Board setting out the principles which should guide them in sanctioning films for public exhibition. The directions were quite comprehensive to prohibit the inclusion of the scenes, sequences, songs and other matters which were obscene or were likely to undermine the accepted canons of decency, or lower the moral standards of those who saw them.

The Government was satisfied that the Board was taking due note of the directive principle.

INDIAN FILMS IN LONDON

Large audiences, mainly of young people, who attend programmes of films at

the Commonwealth Institute in London will soon have an opportunity of seeing films about life in India.

Scheduled to be shown in the near future are two Indian films—**Khajuraho** and **Kerala**. They will appear in the same programmes as other films from Australia, Rhodesia and Nyasaland, Tanganyika, Ghana, Canada, New Zealand, Malaya, Pakistan, Mauritius, and the Cook Islands.

These films are among the most popular features of the institute's programme and attract large organized parties of students who are keen to learn about how people in other parts of the Commonwealth work and play.

The institute is also the headquarters of many social activities of the Commonwealth Students Club, which provides a programme of games, films, dancing, lectures, debates and discussions, and organized visits.

The exhibition galleries of the institute contain permanent displays on every country in the Commonwealth.

INTERNATIONAL FILM FESTIVAL

The Minister for Information and Broadcasting, Dr. Keskar, has said that an International Film Festival would be organised by the Ministry in collaboration with the Film Federation of India. He told the Informal Consultative Committee of Parliament for his Ministry that if this festival proved successful, such festivals could be held every few years. The proposed festival, he said, would be held in New Delhi, Bombay, Calcutta and Madras in October-November this year.

THOMAS EDISON FOUNDATION AWARDS

The Thomas Alva Edison Foundation cited two theatrical films among its 1960 media awards. United Artists' **"The Alamo"** was named the film best serving the national interest. Walt Disney's **"Swiss Family Robinson"** was chosen the best children's film.

The awards were presented before 400 guests at a Waldorf-Astoria dinner to Arthur B. Krim, U.A. president, and Irving Ludwig, Buena Vista Distributing president, respectively, by Dr. Robert C. Clothier, President-Emeritus of Rutgers University.

33 FILMS BANNED IN FOREIGN LANDS

Thirty-six Indian films were banned by foreign countries during 1960-61, Prime Minister Nehru informed Mr. Pangarkar in a written reply in the Lok Sabha last Friday. The countries which had imposed the ban included Indonesia, Malaya, Singapore, Turkey, Afghanistan, Ghana and Morocco.

* * *

"CIRCARAMA" COMING TO INDIA

A new American depth film, the first of its kind in the world, will be screened in India in September this year in five principal cities.

The film, called "circarama", will depict life in the U.S.A. and run for 20 minutes.

Noted for its life-like and realistic effect the film is shown in a goeodesic dome. The film is screened from a 360-degree projection in the dome.

Several hundred people can stand in the dome and watch the film. A battery of projectors is used in screening the film.

The State Department has sponsored the screening of the film. It will be shown for 40 days each, in New Delhi, Calcutta, Bombay, Madras and Bangalore. The big dome and other equipment will be brought from the U.S.A. for exhibition.

* * *

NEW FILM PROCESS

Cinerama Incorporated, in co-operation with Boeing Airplane Company and the United States Government, has developed a "space" motion picture process for use at the Century 21 World Fair in Seattle next year.

The system employs a single lens to create an audience viewing area of 360 degrees horizontally and 160 degrees vertically.

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334- M.T. LUDHIANA, N. INDIA.

FORTHCOMING EXAMINATION**Air Force Flying College Examination, November, 1961**

The Union Public Service Commission will hold an examination at Allahabad, Bangalore, Bhopal, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Jammu, Madras, Nagpur, Patiala, Patna, Shillong and Trivandrum on 2nd and 3rd November, 1961, for admission to the Air Force Flying College.

Age Limits: Candidates must have been born not earlier than 2nd August, 1941, and not later than 1st February, 1945. These age limits can in no case be relaxed.

Qualifications: Matriculation or equivalent. Application from candidates who have appeared or intend to appear at Matriculation or equivalent examination acceptable provisionally. Application forms and full particulars obtainable from the Secretary, Union Public Service Commission, Dholpur House, D.H.Q., P.O., New Delhi-11, by remitting Re. 1.00 by Money Order or on cash payment at the counter. Every candidate must clearly state on Money Order Coupon "Air Force Flying College Examination, November, 1961." and, also give his name and full postal address in "block letters". Postal Orders or cheques or currency notes will not be accepted in lieu of Money Orders. Application forms and connected papers are also obtainable free from the nearest Air Force Recruiting Office/Air Force Station or the National Cadet Corps Unit. Only unmarried male candidates can apply for admission to this examination. Completed applications must reach the Union Public Service Commission by 3rd July, 1961 (17th July, 1961, in the case of candidates residing abroad).

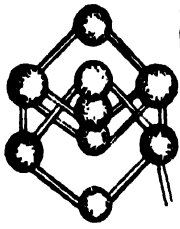
Look your man squarely in the eye. Tell him you did the wrong thing. Tell him you're sorry. Tell him it won't happen again.

And be sure you mean what say, because most people have a shrewd way of sensing insincerity.

Above all, don't alibi. don't dredge up excuses, don't weasel out, don't blame somebody else.

Don't be ashamed to apologise when you've been wrong. The ability to face up to a mistake and acknowledge it is one good measure of a man.

—Lynn Surless and W.A. Stanbury



SCIENCE

& INVENTION

RUSSIAN SPACE-SHIPS RECOVERED

On March 9, 1961, Soviet scientists placed an artificial satellite (fourth Soviet spaceship) in orbit round the Earth with a dog named **Chernushka** (Blackie) on board.

After fulfilling the pre-determined research programme, the satellite was brought back to Earth the same day on command from the Earth in a pre-set area in U.S.S.R. The dog was well.

The satellite weighed about $4\frac{1}{2}$ tons, not counting the final stage of the carrier-rocket.

A **Tass** announcement said: "The orbital vehicle followed a path close to the calculated one with its lowest limit of 183.5 kilometres and its highest limit of 248.2 kilometres from the Earth. The equatorial inclination of the orbit was 64 degrees 59 minutes. The main object of this effort was a further improvement of space vehicle design and of life-support equipment.

"The satellite carried a cabin with an experimental animal—a dog named **Chernushka**—and other biological objects as well as telemetric and television systems, a radio-system for trajectory measurements and radio-communications apparatus. The instrumentation on board the vessel functioned normally during the flight.

"Initial inspection of the landed vessel proved that the experimental animal feels well. As a result of the launching of the fourth Soviet satellite and its successful recovery from the orbit, valuable data have been obtained on the efficiency of the structure of the ship and its system as well as on the nature of the influence flight conditions have on living organisms. The data obtained are now being studied and processed. The biological objects which made the flight are under constant supervision."

The 5th Soviet satellite space ship was put into orbit around the earth on March 25, 1961. It weighed 4,695 kilograms without the last stage of the carrier rocket and had a cabin with an experimental animal—the dog "**Zvezdochka**" (Starlet) and other

biological objects, as well as telemetric and television systems, a radio system for trajectory measurements and radio equipment.

Having carried out the necessary research programme, the satellite space ship descended successfully on command from the earth and landed in the predetermined area.

Preliminary investigation showed that the experimental animal felt normal. The ship's instrumentation functioned normally during flight.

The main purpose of the launching was the further improvement of the design of the satellite space ship and its systems for ensuring the safety of man during his flight into outer space and back to earth.

The space ship moved along on orbit close to the calculated one with the bottom elevation of 178.1 kilometres, the top elevation of 247 kilometres, at an angle of 64 degrees 54 minutes to the equatorial plane.

The launching of the 5th Soviet satellite space ship and the successful recovery from orbit yielded valuable information about both the functioning of the ship and its systems, and the effect of flight conditions on living organisms.

A **Tass** correspondent was told at the U.S.S.R. Academy of Sciences that travelling with "**Zvezdochka**" in the space ship's capsule were laboratory mice, guinea pigs, frogs, microbes and viruses, ray fungi, dry seeds of various plants, onion shoots and other organisms, as well as a solution of the desoxiribonucleic acid and various ferments.

Preliminary investigations had shown that the biological objects were in satisfactory conditions and had fully retained their vital capacity. The physiological characteristics of the dog "**Zvezdochka**" were practically the same as before the flight.

* * *

HEART-LUNG MACHINE

A new, compact, self-regulating heart-lung machine has been built by a physician in Detroit, U.S.A. (Heart-lung ma-

chines, by taking over the work of the heart and lungs to maintain normal circulation, allow surgery to be performed on the heart while it is empty of blood.)

The new type unit weighs only 10 pounds. It is powered by oxygen pressure instead of electricity, and includes a device for controlling blood temperature. Its builder, Dr. Sam I. Lerman, says it stops automatically when the blood level in its reservoir is low, so cannot pump back into the arteries. He reports that preliminary trials of the machine on dogs have worked well.

* * *

HAZARD OF RADIO-ACTIVE FALLOUT

Without minimizing the danger to man from the radioactive fallout from nuclear weapons' tests, Prof. Shieles Warren, Chairman of the U.N. Committee on Radiation, declared that much of what had been said on it was exaggerated.

He said: "Radiation is a type of energy to which the human race has been subjected in a very slight form since life began. Wisely used, it is a life-saver. Radioactive fallout will not do us any good; but it had not done us any harm. It is needless to worry about it now. Only in the event of an atomic war will there be levels of radiation achieved which might be in the danger zone".

Prof. Warren, who was speaking on the effects of radiation on the human race under the auspices of the Vallabhbhai Patel Chest Institute at Lady Hardinge Medical College, New Delhi, on April 8, 1961, praised the efforts of Mr. Nehru and other world leaders to promote the peaceful uses of atomic energy.

Radiation, he said, was like a two-edged sword, immensely helpful but disastrous if misused. It was for mankind to decide and choose which it should be. While 100 r (the unit of radiation dose measure) would result in mild sickness, 1,000 r meant death for people and two million r would kill all bacteria and viruses.

On atomic tests and the resultant radioactive fallout, Prof. Warren said that the fallout was so slow and little that it was harmless: it caused only temporary harm.

The tests carried out by Soviet Russia in 1958 had scattered more radioactive isotopes in Europe and Asia than any other

tests. He added: "There has been more sheer tripe written about radiation hazards than on any other subject. If one were to believe 'On the Beach' (by Nevile Shute) a truly horrible case is made out".

Prof. Warren dismissed as "ridiculous" the view that the discharge of radioactive waste into the sea could be harmful. This was because the sea already had radium, thorium and a radioactive form of potassium. During the International Geophysical Year, some oceanographers wanted to carry out experiments with radioactive materials, but it proved impractical as there was so much radioactivity in the ocean already that to add to it would have taken more radioactive material than was available in the whole world.

* * *

"KABANOV EFFECT"

On a radar screen you can now get a "picture" from any part of the world beyond the geometrical horizon. This is the result of a discovery made by Soviet scientist Nikolai Kabanov.

Formerly radar could only "see" things within a 1,000 kilometre range. Experts considered it impossible to obtain an image from beyond the geometrical horizon because in the accepted view only the ionosphere reflected radio beams.

Nikolai Kabanov has refuted this concept. He has proved that a beam follows a broken line: ionosphere—earth—ionosphere—earth and in this way returns to the source. Thus it can show on the screen a given area or object situated thousands of kilometres away from the observation post.

Recently, a special ceremony was held by the U.S.S.R. Council of Ministers' Committee for Inventions and Discoveries, at which Nikolai Kabanov was presented with a Diploma No. 1 and a premium for his outstanding discovery. Henceforth his discovery will be known as the Kabanov effect, after the scientist.

The practical advantage of the Kabanov effect is that it enables the most advantageous frequencies to be selected for long-range radio communications and for ionospheric observation and research.

The discovery will make it possible to substantially improve the reliability of radio communications, to organize TV transmission on a world scale and send out transmissions from less powerful stations,

using simpler antennae. It will become possible to cut down radio interference radically.

* * *

BOUNCING CONVERSATIONS OFF THE MOON

When an American scientist in California talked to a colleague in Woomera, northern Australia, recently his voice travelled 450,000 miles although the men were only 8,000 miles apart. The reason was that their conversation was bounced off the moon, 225,000 miles away.

A powerful radio transmitter at Goldstone, California, bounced a message from Dr. Hugh Dryden, Deputy Chief of the U.S. National Aeronautics and Space Administration, off the moon to the deep-space tracking station at Woomera where it was picked up clearly. The Woomera station responded by radio-telephone, because it can receive but not transmit by way of the moon. The two stations have already experimented with radio signals bounced off the moon, but this was their first test with voice transmission.

Conversations by way of the moon have been carried on before but never between stations situated so far apart.

* * *

NICKEL IN CIGARETTES MAY CAUSE LUNG CANCER

Researchers at Jefferson Medical College in Philadelphia have found enough nickel in cigarette smoke to make them believe in metal may produce lung cancer in smokers.

In the experiments rats developed cancer when they were given whiffs of air containing traces of nickel three times a week for a year. The researchers recommend that an effort be made to eliminate nickel vapours from tobacco smoke.

* * *

SATELLITE TRACKING AT NAINITAL OBSERVATORY

Shri Humayun Kabir, Union Minister of Scientific Research and Cultural Affairs, told the Lok Sabha on March 10 that the Satellite Tracking Station of the Uttar Pradesh State Observatory at Nainital went into operation in September, 1958, and has since been tracking almost all satellites put into orbit by the U.S.A. and the U.S.S.R.

The Minister said that the total number of observations of satellites obtained at the Nainital Observatory up to February 20, 1961, was 1,453.

The Minister said that Sputnik I and II were put into orbit before September 1958 and had decayed; they were not tracked. Their trails were, however, photographed on one occasion by an ordinary camera.

Shri Kabir added that every satellite that was put into orbit and about which a request for tracking was obtained from the Smithsonian Astrophysical Observatory, U.S.A., was tracked.

The observations at Nainital were limited to photographing the satellites against background stars with the help of a special type of satellite tracking camera. Along with the photograph of the satellite accurate time from a quartz clock was also recorded. In this way, the accurate position of the satellite at known times was obtained. The photographic film containing the image of the satellite was sent to the Smithsonian Observatory for precise reduction of data. Any person interested in them could request and obtain these data from that Observatory.

* * *

PLANTS KILL PESTS

Scientists have estimated that world losses of crops from plant diseases and pests sometimes reach 10 per cent of the annual harvest. It is a bitter thing for a farmer to realise that every tenth kilogram of grain, vegetables, fruits and other agricultural products is destroyed by the enemies of fields and orchards.

Soviet scientists have discovered substances which after penetrating into a plant through its leaves, stalk and roots, make its juices poisonous for insect-pests. After a single treatment a plant acquires toxic properties for a period of up to three months. This, in effect, is enough to protect the crops for the entire vegetation period. It is worth mentioning here that these new chemicals can be used for the dusting and spraying of plants, as well as for introduction into the soil during watering. In all cases the effect is equally good. If after this the enemy touches the plant he immediately perishes. The interesting thing is that this new preparation of octamethyl among other things possesses "selective properties": it destroys only the enemies of orchards but is absolutely harmless to useful insects.

Such intraplant poisons are already being used on some of the fields and or-

chards of the Soviet Union. True, so far they do not kill all the pests on all types of crops. But a victory has already been won over some of the pests. Experiments are now in progress on other highly effective intraplant poisons against the enemies of fields and orchards. Scientists quite confidently state that the time is not far off when man will be able to stop paying "contributions" to parasites, and will fully protect his crops.

* * * "ELECTRONIC VOICE"

An "electronic voice" has been developed for victims of paralysis or surgical removal of the larynx. A little smaller than a telephone receiver, it is pressed against the throat to send audible sound waves into the throat and mouth cavity. The waves are turned into speech by the user by forming words with his lips and tongue as he would in normal speech. The Bell Telephone system developed the device, which runs on batteries.

* * * "SURGICAL TAPE"

A new, porous adhesive tape which takes the place of stitches in closing wounds and incisions has been developed by three surgeons from New York. The tape applied in strips across the wound, does not irritate the skin and, it peels off like wet paper after the wound has healed, the surgeons report. Medication reportedly can be applied through the porous tape, which was exhibited at a meeting of the American Medical Association by one of its developers, Mr. Theodore Golden.

* * * U.S. SATELLITES IN ORBIT

Upto end of February 1961, the United States had 22 satellites in orbit, with 11 sending back scientific information to earth.

Since January 31, 1958, when the first U.S. satellite went up into space, the United States has launched 36 into earth orbits. Two into solar orbits and two non-orbiting space probes. Comparable figures for the Soviet Union's space programme—which sent up its first satellite Oct. 4, 1957—are nine satellites launched into earth orbits, two into solar orbits and one that orbits the moon.

* * * NEW TYPE OF PAPER DEVELOPED

One of the latest development in paper-making is a twisted, knitted paper that

reportedly can be boiled, washed or dry cleaned and re-used as many as 30 times.

It is produced by a single mechanical operation which converts paper into yarn narrow enough to be knitted into fabric. Suggested uses for the paper are as hats, bags and heat-shielding materials.

* * * SCIENCE TALENT CONTEST

A 17-year-old boy's experiments with ring doves led him to question an established theory of bird behaviour and won for him the \$7,500 top prize in the 20th annual science talent search.

He is Joshua Wallman, a high school senior from New York City, whose patient study of the birds' courtship ritual paid off when he won the Westinghouse science scholarship and was acclaimed as one of the nation's most promising young scientists. Four other top prizes were awarded.

Wallman and 39 other students were finalists in the talent search from a field of more than 25,000 students from all over the United States who had entered the search.

Edward Charles Jones, 17, of Arlington, Virginia, won the second prize for original work in mathematics. He defined and proved the properties of convex smooth curves.

The annual competition to discover and aid scientific talent at an early age is conducted by the science clubs of America and is supported by the Westinghouse Electric Corporation's Educational Foundation which awards \$34,250 in prizes to the finalists.

A consulting psychologist of my acquaintance once met Eleanor Roosevelt and asked her how she managed to keep up her extraordinary schedule of activities without collapsing.

"Whenever I'm doing anything," she said, "I relax all muscles except those I absolutely have to use. Even when I read on a train or plane, I do so in such a relaxed position that anyone seeing me would imagine I WAS HALF ASLEEP, MAY be even drunk."

Most of us tense up, and use a lot of unnecessary muscular power on almost everything we do. We assume that worry produces tension, but some wise psychologists warn us that muscular tension also produces worry.

—Dora Albert

People IN THE NEWS

PANDIT MOTILAL NEHRU.

On May 6, 1961, India celebrated the 100th birthday of Pandit Motilal Nehru, a great nationalist leader of the country.

Pandit Motilal was the scion of a Kashmiri Brahmin family settled in Delhi, during the Mughal Rule period. But he was actually born in Agra. His father, Pandit Gangadhar Nehru, was the Kotwal of Delhi. His father having died two months before Motilal was born, an uncle Nandalal brought up the boy and educated him. Winning a gold-medal for his law-studies, Motilal became a High Court Vakil, standing first in his examination. He joined an elder brother to practise in courts. The family by this time moved to Allahabad.

Allahabad, then was in its hey-day, with a galaxy of men who were truly great, Motilal, amongst them, stood out clearly in legal eminence. Married to Swaroop Rani he became father of three children—Jawaharlal, Vijayalakshmi and Krishna—a son and two daughters. If Motilal came into the Congress, it was due to Jawaharlal and Gandhiji. Once he came in, he stood up as an able lieutenant of the Mahatma. He first entered in active politics in 1892 when he joined as a member of the Reception Committee of the Congress session in Allahabad. Motilal was first arrested in 1921, during the Prince of Wales' visit to Allahabad. The prince is the present Duke of Windsor.

In 1922, Motilal joined C. R. Das in forming the Swaraj Party. In 1924 he entered the Central Legislative Assembly as the Leader of the opposition and functioned magnificently. A Swarajist in Vithalbhai Patel became Speaker of the House. Men like B. C. Pal, Jinnah, Lala Lajpat Rai were front-rank members of the House then. It was an eventful period in India's Legislative History, the towering personality of Motilal standing at its zenith. He was not very impressive as a speaker, but it was a pleasure to read his speeches when put to print.

cutta Congress and in the following year put the Presidential crown on Jawaharlal at the Lahore Congress, in a moving scene as the Nation's rulership by people's will passed from father to son.

In June 1930, Motilal was again arrested and sent to the Naini Jail in connection with the mass civil disobedience. There he constantly spat blood. Dr. Ansari and Dr. B. C. Roy had to examine him after Motilal died in Lucknow on Jan. 29, 1931. His body was taken to Allahabad in an open-car drive by R. S. Pundit, the deceased's son-in-law and given a great funeral honour.

* * *

AMBASSADOR J. K. GALBRAITH

Twice during the past five years, in 1956 and 1959, a tall scholarly American visited India to lecture on economics, to observe the working of India's economy, to study Indian art and architecture, and to talk with people in all walks of life.

Now that same man—John Kenneth Galbraith, distinguished professor, econ-



U.S. Ambassador to India
John Kenneth Galbraith

mist and author has returned to India in still another role; Ambassador of the United States in succession to Ellsworth Bunker. He is possibly the tallest man in U.S. academic and public life today, standing at six feet eight inches.

Although he has been Professor of Economics at Harvard University since 1949, he is by no means an "ivory tower" economist. Several years of Government service, five years as an editor of *Fortune Magazine*, and his many provocative books and articles on American and Asian economic problems have won him international recognition as an expert on the complicated and delicate interplay of economics and politics in this Space Age.

Professor Galbraith was born on October 15, 1908 on a farm in the Canadian Province of Ontario. After receiving his bachelor's degree in agriculture from Ontario Agricultural College, he moved to the United States in 1931 and took his doctorate in economics from the University of California.

He first went to Harvard in 1934 as an instructor and tutor, leaving in 1937 to become a Social Science Research Fellow at Cambridge University, England. He returned to the United States in 1939 to accept appointment as Assistant Professor of Economics at Princeton University, only to leave after a year to enter government service following the outbreak of World War II.

A paper he published on the strategy of wartime controls led him eventually to the post of Deputy Administrator of the Office of Price Administration. He resigned from this position in 1943 when, as he recalls it, "I reached the point that all price fixers reach—my enemies outnumbered my friends!"

After further government service as Director of the U.S. Strategic Bombing Survey, investigating the effects of air attacks on the war production capacity of Japan and Germany, and as Director of the U.S. State Department's Office of Economic Security Policy, Dr. Galbraith returned in 1949 to Harvard as Professor of Economics. For his service in Washington, a grateful government awarded him the Medal of Freedom and the President's Certificate of Merit.

With his return to Harvard—which he

described as "relaxation" compared to his government service—Professor Galbraith continued to grow in national and international prominence as a result of his prolific writings. His first book, *American Capitalism: The Concept of Countervailing Power* published in 1951, was followed by *The Great Crash: 1929*, published in 1955; *The Affluent Society* in 1958; *Journey to Poland and Yugoslavia*, also in 1958, and his most recent book, *The Liberal Hour*, published last year.

Professor Galbraith also has written extensively on various aspects of economic development in India and neighbouring countries, and some of his works have been published in this country. He first visited India in 1956 as one of a group invited by the Indian Statistical Institute to be present at the beginning of the Second Five Year Plan, and he remained here for several months at that time. In 1959 he spent several weeks here observing steel mills at Rourkela and industrial development progress in general in connection with a study he was preparing of management under varying economic systems.

In the relatively rare vacation intervals between his many activities, Professor Galbraith spends his time with his family—Mrs. Galbraith and three sons, Alan, Peter and James on their "unfarmed farm," a 200-woodland tract in Vermont.

Professor Galbraith presented his credentials to the President of India on April 18, 1961.

* * * YURI A. GAGARIN

Major Yuri Alekseyevich Gagarin, the world's first spaceman, was born into a collective farmer's family on March 9, 1934, in the Gzhatsk district, Smolensk region of the Federation.

His mother, Anna Gagarina, told the reporters, who interviewed her, that when Yuri was seven, World War II began and a terrible time came. Together with the children she lived in a mud-hut because the Nazis ransacked the collective farm and evicted the people from their homes. In 1942 a great misfortune befell the Gagarin Family: the Nazis deported to the West Yuri's elder brother and sister. Only at the end of war we learned, Anna Gagarina writes, that Soviet troops freed them from the death camp.

The little hero had known both cold and hunger. As soon as the Nazis were ousted from the Smolensk region, the boy went to school. He spent all his free time at the workbench, building models of planes and gliders and helping his teacher to make teaching aids.

In childhood, Yuri devoted much time to sports. He decided to become a pilot and said that he must be strong and hardened. No sooner did the snow melt than he was swimming in the river. He also liked football and volleyball.

Yuri's teachers at the school attended by him told newspaper correspondents that Yuri liked mathematics and physics, and was an active member of the mathematics group. He often spent his free time in the school's physics room. Yuri's friends from the vocational school said that as a boy he was interested in planes and dreamed of becoming a pilot. Knowing of the exacting demands made on pilots, he tried to cultivate courage, persistence and will-power.

He paid special attention to physical training. He liked to ski from high steep hills, skated and was a fairly good football and basketball player. At the Young Pioneers' Club, he built model aircraft and read books on aeronautics.

While at the vocational school in Lyubertsy, he worked simultaneously as a moulder at the Lyubertsy Farm Machinery Plant. Gagarin was the only graduate of the vocational school to receive the highest, sixth, rating at the works. He had a knack of distributing his time in a rational manner and, as a result, managed to engage in sports, visit interesting competitions and, on top of all this, attend an evening school. He was a good student, and graduated with honours from the seven-year school and the vocational school simultaneously.

In 1941 he went to School, but because of the Nazi invasion had to discontinue his studies.

After the end of World War II, the Gagarin family moved to the town of Gzhatsk. Yuri continued his secondary school education there. In 1951 he finished with distinction a vocational school in Lyubertsy, outside Moscow, where he qualified as moulder. Simultaneously he finished an evening secondary school for working youth. After that Yuri Gagarin

studied at an industrial school (technicum) at Saratov on the Volga, and in 1955 graduated from it with honours.

Gagarin started his flying career while still a technicum student when he took a course of instruction at the Saratov Aero Club. After completing the course at the Aero Club in 1955 he entered an air school at Orenburg. Since 1957, when Gagarin graduated from the school, with grade A, he has been a Soviet aviator.

Last year Yuri Gagarin became a member of the Communist Party of the Soviet Union.

He is married. His wife Valentine Gagarina, 26, graduated from a medical school at Orenburg. They have two daughters: Yelena and Galya, aged two years and two months respectively.

Gagarin's father, 59, is a joiner, and his mother Anna, born in 1903, is a housewife.

* * * HASSAN II OF MOROCCO

Hassan II (formerly Prince Moulay Hassan) has been proclaimed the new King of Morocco. His father, late King Mohamed V, had harnessed his hopes on the young prince from an early age, as he was the eldest son and rightful inheritor of the throne. The prince was given a royal education according to Muslim traditions. Without evincing unusual aptitudes, the Prince acquitted himself well in his studies. His father had never been beyond the elementary grade. He, however, expected of his son a harvest of degrees by threat and promise. In the course of time Moulay Hassan became doctor of law.

However, the question of upbringing remained. The King said to himself by alternating parables and fables with corporal punishment. His son had plenty of spirit, a little too much in fact to be content with conventional morals. His father told him one day:

"See this board. Every time you make a fool of yourself, I shall knock a nail into it. Each time you do something worthwhile, I shall remove one. But mind your step. If ever that board gets covered with nails, you will cease to be my son and heir."

The board was nearly full when Moulay Hassan grew scared and mended his
(Continued on page 568)

Parliamentary Affairs

(April 3 To 22, 1961)

DEBATE ON FOREIGN AFFAIRS

The Prime Minister said in the Lok Sabha on April 3, that India was opposed to Shri Rajeshwar Dayal being replaced as the U.N. Secretary-General's Representative in the Congo, in the present context or in the foreseeable future. India did not like keeping her best men on outside assignments indefinitely, but Shri Rajeshwar Dayal's withdrawal from the Congo would mean a new balance being created there against the implementation of the Security Council's Resolution. If such a situation arose, India would have to consider whether her troops in the Congo could be properly utilised.

Dealing with criticism of China policy, the Prime Minister said that while preparing for any contingency, India did not propose to take any adventurist action. Facts about the border trouble had now become clear and India's attitude of adhering strongly to her position was certainly exercising a pressure on the Chinese Government. What he had stated the other day was that the facts had been brought out so clearly that even the Chinese Government might be affected and begin to feel how strong India's case is. Nations changed their policies under various pressures, not merely that of war, and the firmness of India's stand was not something the Chinese Government could look upon with contentment.

Shri Nehru denied the statement by Acharya Kripalani that China was isolating India from her neighbours. He said there had been no lessening of close contacts and in fact India herself had advised Burma that she should go ahead with a boundary agreement with China if she could get a good settlement, which did not affect our interests. Referring to another point of criticism by Acharya Kripalani that senior diplomats were appointed to Europe and America, the Prime Minister said our neighbouring countries were given the first place and distinguished Ambassadors were appointed to Pakistan, Burma

and China. About another suggestion by Acharya Kripalani that a senior Minister should relieve the Prime Minister of his burden in the Foreign Department, Shri Nehru said he always endeavoured to share that burden. All important matters came up before the Foreign Affairs and Defence Committees of the Cabinet and in addition informal consultations were fairly frequent.

As for sending forces abroad, a decision whose constitutional propriety was questioned by Acharya Kripalani, the Prime Minister said there was no doubt that in law and under the Constitution, the executive could do so. It would not be a good thing to put some kind of Constitutional barrier.

PROGRESS OF SHIPPING

The Government-owned Eastern and Western Shipping Corporations are to be amalgamated and will be known as the Shipping Corporation. It will have a non-official Chairman and the Board of Directors will also include non-officials. This was announced in the Lok Sabha on April 6 by the Union Minister, Shri Raj Bahadur, during the debate on the demands of the Ministry of Transport and Communications.

He said it was Government's intention to enter the Corporation in the India-U.K. conference so that it could engage in lucrative trade. It had also been decided to enter the Burma trade and to lift a quota of rice. Two new routes were proposed for the Corporation. The first, from the West Coast to Japan, might be started by the middle of this year, and the second, between the West Coast and Australia, later in the Third Plan period.

Reviewing the progress of shipping, he said the second Plan target of nine lakh tons had been achieved. The tonnage at the time of independence was less than 2.5 lakhs. The public sector now owned 17 ships totalling over two lakh tons.

the need for entering the overseas tanker trade, he said Government had recently relaxed the condition about the acquisition of tankers only in the public sector.

The Minister outlined the steps Government were taking to promote shipping and said that as a result, three new shipping companies had been registered last year. One of them was trying to acquire bulk cargo vessels and another oil tankers. He said that the progress made so far had brought Indian shipping to the take off stage.

Referring to coastal shipping, Shri Raj Bahadur said that it had been decided to allow an additional one million tons of coal to be moved by it. As for the Hindustan Shipyard, he said there were now adequate orders for new vessels. There was already one order for a tanker for the Navy and one for the Scindias. The Shipping Corporation was placing orders for six vessels. There were assurances of more orders from Scindias and the India Steamship Company. He said that for the first time, a systematic effort was being made to organise the sailing vessels industry.

DEMANDS FOR REHABILITATION

Replying to the debate on the budget demands of the Rehabilitation Ministry, the Rehabilitation Minister, Shri Mohi Chand Khanna, made it plain that Government would be firm on the question of settlement in Dandakarnaya of East Bengal refugees. Over Rs. 10 crores had already been spent on the project. Notices had been issued to 5,000 families in camps in West Bengal and by the end of the year all the 16,000 agricultural families would receive notices. Those failing to go to Dandakarnaya would have their doles stopped. The Minister said it was in the interest of these families to move to Dandakarnaya for no lands were available in West Bengal.

Speaking about problems of displaced persons from West Pakistan, he said compensation remained to be paid to only about 10,000 or 15,000 persons out of five lakh claimants. As for problems to be settled with Pakistan, Shri Khanna regretted that in spite of India's best efforts it had not been possible to get a satisfactory response from Pakistan. Hindus and Sikhs left properties worth Rs. 500 crores in West Pakistan as against Rs. 100 crores left by

Muslims who migrated. The Pakistan Government, however, had never agreed to discuss the question. In respect of the implementation of the agreement about moveable property, hardly anything had come out in actual practice.

DEFENCE APPOINTMENTS STRICTLY ON MERIT

Intervening in the debate of the Defence estimates in the Lok Sabha on April 12, the Prime Minister defended every senior appointment or promotion in the Army. He said, as Prime Minister he was personally responsible for each one of them. The criticism of Acharya Kripalani and other opposition members was based on completely wrong and distorted facts.

Shri Nehru said that in the matter of senior appointments the Defence Minister did not do anything off his own bat. There had not been a single case of an appointment or a promotion in which the Prime Minister and also senior members of the Cabinet had not been consulted.

The Army would go to pieces if top-ranking appointments were made only on the basis of seniority and not on merit. Shri Nehru said these appointments were not made casually but after full consultation and discussion, and he thought the appointments made were proper and the choice good. The practice of disgruntled officers approaching opposition members would encourage all kinds of wrong accusations, charges and counter-charges which could not be dealt with.

The House gave its approval to the Defence estimates totalling nearly Rs. 315 crores after rejecting all cut motions. Winding up the debate, Shri Krishna Menon reaffirmed that the morale of the Army was very high, in fact higher than ever before. Promotions were made with great propriety and care, conforming to the rules laid down and there was no injustice done. All senior officers were satisfied except those who thought that advancement through merit could be short-circuited by political intervention.

The Defence Minister also said that the Armed Forces were well-equipped and the equipment was improving day by day through indigenous production which lent itself to greater quality control. All kinds of guns, vehicles and electronics were being produced at home and the defence

stores purchased abroad had gone down in value from more than Rs. 93.5 crores in 1957-58 to a little over Rs. 48 crores in 1960-61.

Shri Menon denied that the acquisition of Russian transport aircraft represented any departure from the policy of non-alignment. He said the country would by what it required from wherever it considered suitable. The planes bought from Russia were meant to carry goods and personnel to inaccessible areas and our own crew were now able to pilot those aircraft. The services of the Russian pilots would be terminated next week. Shri Menon said the Russian pilots, while helping our crew to test the planes, had not gone to any territory where other foreigners were not allowed. The Russian planes had performed extremely well and were suitable for our purpose.

Referring to criticism of the steps to defend the country against Chinese aggression, Shri Menon said the frontiers were well-protected and our troops were in advance positions.

COMMUNITY DEVELOPMENT PROJECTS

The Minister for Community Development, Shri S. K. Dey, said in the Lok Sabha on April 13 that it was hoped that 25 to 30 per cent of sugar would be produced in the cooperative sector by the end of the Third plan period. Winding up the debate on the demands of his Ministry, he said a beginning had been made with consumer cooperatives also. Two committees were now going into the question of consumer cooperatives and processing cooperatives.

On co-operative joint farming, Shri Dey made it clear that there was no intention to force anyone to surrender his land nor was there any idea of collectivising land. The concept evolved by Government was that land and labour should be pooled for agriculture as well as other purposes like village industry. Because of opposition of some people to co-operative farming, Government was very careful to see that there was not even a semblance of coercion and that it was conducted entirely on the voluntary principle.

About panchayati raj, the Minister said that some of the States which were now in the process of introducing democratic decentralisation were adopting a more radi-

cal approach. Gujarat wanted to transfer 100 per cent of the resources to the panchayati institutions and Maharashtra was thinking on similar lines. Madhya Pradesh had just enacted its legislation and Bihar was going ahead with it. The Uttar Pradesh Chief Minister had informed him that by August or September, panchayat samitis would be installed. The scheme of zila parishads would be taken up after the general election. In West Bengal, a start was being made with village panchayats. So far as the Union Territories were concerned, their future administrative set-up was under consideration and panchayati raj would be integrated with it.

Shri Dey laid down six tests for the success of panchayati raj. How far it made better use of the officials and resources placed at its disposal, whether it was able to mobilise idle resources, promote national priorities and disperse initiative; how far it was able to ensure social justice, and create a better understanding of democracy among the people. Shri Dey said it was a remarkable thing that within a year and a half the whole country had accepted the programme of panchayati raj without reservation.

NEHRU DEPLORES FOREIGN INTERVENTION IN CUBA

In a statement on Cuba in the Lok Sabha on April 18, the Prime Minister said it was difficult to conceive that the invasion of the island by air and sea could take place without the acquiescence and perhaps the help of authorities on the American mainland.

While he accepted President Kennedy's statement that no Americans were taking part in the operation in Cuba, Shri Nehru said the people who landed there were coming from the American mainland, may be from the United States or some other territory. This raised the difficult question of what is intervention. One may not go oneself but may encourage others to go.

Shri Nehru described this as a bad precedent because in other cases elsewhere this may be utilised in a particular way. This unfortunate development, he said, had not only created all this turmoil and civil war in Cuba but rather bedevilled other international questions under discussion.

The Prime Minister said there should be no outside intervention and the people

of Cuba themselves should decide what Government they want. So far as India is concerned, he said, we want the Government of Dr. Castro resulting from the Revolution to function. We sympathise with it and we do not want the people of Cuba to destroy themselves in a civil war. According to reports, said Shri Nehru, there had been no large-scale adhesion of the local people to the invading forces.

TAXATION POLICY

Winding up the discussion on the Finance Bill in the Lok Sabha on April 19, Shri Morarji Desai defended the taxation policy of the Government and said it was in line with the indications given in the draft Third Plan. A beginning had been made with tightening the expense accounts of companies. Personal taxation had been increased by proposing higher rates for upper slabs. What was now being done, he said, was not the only thing. At every suitable opportunity, all sources of taxation would be tapped whether direct or indirect to fulfil the Plan.

The indirect taxes proposed in the budget, Shri Desai said, were not such as affected the very poor people. A bulk of them fell only on those who could afford them.

The Finance Minister said it would be his endeavour to see if steps could be taken to prevent a rise in prices just before or soon after the presentation of the budget. The community too could help in this by organising co-operative stores and by refusing to buy from shops which raised prices.

It had been Government's aim to prevent any monopolies. Shri Desai said there were rich people no doubt but they were being taxed. He did not accept the view that direct taxes in India were the highest in the world.

Shri Desai also announced fresh concessions in excise duties on a number of items. Commodities for which concessions have been given include inferior coffee, newsprint, powerlooms, manufacturing cotton, rayon or silk fabrics, fabrics produced on automatic looms, glass and china-ware, porcelain, copper and copper alloys and woollen yarn.

FACTS AND STATISTICS

Monazite Deposits: Country's nuclear power programme is proposed to be based ultimately on thorium of which there is abundant supply in the Monazite sands available in India. According to present knowledge these monazite deposits are the largest in the world.

Export of Isotopes: India recently exported two consignments of radio-active isotopes to Thailand. Enquiries have been received from Japan and a number of other countries for supply of isotopes. Arrangements are being made to export them, once there are firm orders.

Wage Boards: The Government of India propose to set up Wage Boards for Coffee and rubber plantations shortly. The question of constituting Wage Boards for other industries is under consideration.

National Archives of Nepal: The Government of India is assisting Nepal in establishing National Archives including a library of old Sanskrit manuscripts.

Kurseong Radio Station: It has been decided to establish a Radio Station at Kurseong for serving Siliguri and Darjeeling areas. The Station is expected to be brought into service during the current financial year.

Tractor Manufacture: Two hundred and forty-one tractors have been manufactured at the Coimbatore Ordnance Factory up to the end of the last month. The sale prices of these tractors ranged between Rs 38,000 and Rs 1.29 lakhs. These were 25 to 30 per cent lower than the prices of equivalent imported tractors hitherto in use. The cost of production was below the sale prices.

Pig Iron: Government have sanctioned 8 schemes to step up pig iron production in the private sector through medium sized plants. These schemes when implemented would produce 500,000 tons of pig iron.

National Cadet Corps: Government propose to increase the strength of the National Cadet Corps in the next academic year. Uttar Pradesh and Punjab Governments have doubled their target for NCC Rifles. Kerala is another State where the target for NCC Rifles have been exceeded.

Family Planning: Ten family Planning Centres are proposed to be opened by the Punjab Government during 1961.

Translation of Ayurvedic Literature: The Government proposes to translate ancient Ayurvedic literature in English and Hindi. For the present it is proposed to publish translations of two classical works Ashtanga Hridaya and Sushruta Samhita. The work is expected to take eight months.

Educational Progress: Nineteen Engineering Colleges and 24 Polytechnics were opened in the country during 1961.

The expected enrolment position of girls at the primary, middle and secondary stages of education during 1961 indicates that the country has been cleared of a little over 130 lakhs.

Girls' Hostel: Governments have approved the construction of 41 girls' hostels throughout the country involving an expenditure of Rs. 21 lakh. Of these 5 will be located in Uttar Pradesh, 4 each in Assam, Gujarat, Madras, Orissa and Punjab, 3 each in Bihar, Kerala, Maharashtra and Mysore, 2 each in Andhra Pradesh and Madhya Pradesh and 1 each in Rajasthan and Kashmir.

Blood Donation. A voluntary movement for the donation of blood to the blood bank would be launched by Government shortly. This is being done because no one is coming forward to donate it free. There have been instances where even a father or a daughter was unwilling to donate blood to members of the family. Government is faced with a situation in which the demand for blood has increased in view of the availability of better surgical facilities.

Small Hydro-Electric Stations: More than Rs. 15 crores have been provided tentatively in the Third Plan for setting up about 100 small hydroelectric sets in the far-flung areas of some of the States and Union territories. The schemes and their location are now under investigation by the various State Governments.

Sleeper Coaches: Sleeper coaches have been provided on 28 pairs of trains on the Broad Gauge and 8 pairs of trains on the metre gauge. The facility is expected to be introduced on the remaining trains in about a month's time.

PEOPLE IN THE NEWS

(Continued from page 563)

ways. When there were no more nails, he ran triumphantly to his father who daily remarked, 'There are no more nails, I agree, but what about the holes.'

One day in July 1957, the monarch gave his son an unusual present by making him heir to the throne. There was quite an upheaval for never before had the future king been appointed during his predecessor's lifetime. According to tradition the ulemas must meet to designate the heir. Mohamed V decided by decree who was to succeed him.

Before acceding to the throne, this up-to-date prince became commander-in-chief because he loved to wear uniform and alight in the royal garden in a helicopter.

In 1955 early in the year trouble was brewing in the Rif where Salem Ameziane, an up-to-date trouble maker with a taste for Jazz and American cigarettes, was eagerly expected. Finally when solemn warnings proved inadequate repressive measures had to be taken. Moulay Hassan won his spurs.

With the death of Mohammed V the stage is set for big changes in Morocco. Fired by modern conceptions and backed by his uncle, Lalla Aicha, the young king is likely to make a bid to break with feudalistic conditions. However to summarise on the score that this that he means to alter everything is doubtless going to far.

The trouble with most people is that they think with their noses, or fears or wishes rather than with their minds.

—Walter Duranty

We tend to get in this life what we really want, not what we think we want, not what we say we want, but what we really want — Dr. Norman Vincent Peale

Never ascribe to an opponent motives meaner than your own — Barrie

The best cure for worry, depression, melancholy, brooding is to go deliberately forth and try to lift with one's sympathy the gloom of somebody else.

—Arnold Bennett



FOREIGN EVENTS

SIERRA LEONE ACHIEVES INDEPENDENCE

On April 27, 1961, Sierra Leone became the third of the United Kingdom's West African territories to achieve independence during the past four years.

Ghana was the first, in 1957, and the Federation of Nigeria followed in October 1960. This year has come the turn of a country with a history unique among Britain's dependencies. Sierra Leone consists of a Colony and a Protectorate whose connections with Britain are of quite different origins. The Colony was established by British philanthropists as a home for freed slaves as early as 1787; the Protectorate over the hinterland was not declared until more than a century later.

Sierra Leone covers 27,925 square miles and has 210 miles of sea coast. As the base of the forested hills of the Sierra Leone peninsula is Freetown, the capital, which has a population of over 100,000 and possesses one of the finest natural harbours in the world.

This city—with its famous college of Fourah Bay, associated with Britain's Durham University—is not only the seat of Government, but also the foremost trade and cultural centre in Sierra Leone, long the home of one of the most advanced communities in West Africa.

The Protectorate area of the new nation comprises three Provinces and covers 27,669 square miles. It is laced by a network of rivers and streams, and ranges from flat, low-lying country with extensive mangrove swamps, to an upland plateau of some 1,500 feet; near the Guinea border, Bintimani peak and the summits of the Tingi Range rise to over 6,000 feet.

In the South-West Province the rivers and inlets are lined with coconut palms. In the past the main crop has been piassava—a fibre extracted from raffia palm which is used for brooms and brushes—but the cultivation of rice is being encouraged by the Government. The climate is humid, and over the whole of the plains the rain-

fall in Sierra Leone averages 100 inches a year.

The Northern Province is a country of great variety and many different peoples. In the hills to the east, round the historic city of Kabala, nomad herdsmen tend herds of dwarf cattle, the only breed that can withstand the disease spread by the ever-present tsetse fly. In the north-west are tidal swamps, and further, south the iron ore deposits of Marampa.

The South-East Province is the richest of the three, possessing a suitable climate for coffee and cocoa cultivation, and the extensive diamond deposits.

There are approximately 2,260,000 people in Sierra Leone, the Creoles, descendants of freed slaves, live mainly in the Colony area, and there are many different tribes in the interior. Most of the people grow their own food—rice, palm oil, cassava, millet, maize, sweet potatoes, yams, bananas and plantains, chillies etc.

A stumbling block to the Government's plans to develop processing industries is a shortage of natural fuel. There is, however, scope for hydro-electric development, and between 1950 and 1958 available power rose from 5.93 million to 21.09 million kilowatts.

Communications on land are made difficult by densely wooded or swampy terrain, but there are almost 3,000 miles of roads, and a railway connects Freetown with several of the inland centres.

Following are some important events in the history of Sierra Leone:

- 1562 Arrival of Sir John Howkins, probably the first Englishman to visit the country.
- 1787 Following a decision to create a home for freed, destitute slaves, Granville Sharpe, a leader of the slavery-abolition movement, sent out settlers who founded Freetown.
- 1799 The Sierra Leone Company granted a Royal Charter; Freetown constituted a corporation, with mayor and aldermen.

- 1807 The United Kingdom Parliament made the slave trade illegal.
- 1808 Sierra Leone made a Crown Colony; The Governor took over the administration with a council of Advisers.
- 1811 First unofficial member appointed to Advisory Council.
- 1827 The Church Missionary Society Founded the college at Fourah Bay.
- 1863 The Council of Advisers was recognised as a Legislative Council, and an Executive Council was appointed.
- 1876 Fourah Bay College affiliated to Durban University.
- 1896 Sierra Leone became a British Dominion.
- 1923 Non-official membership of the Legislative Council was increased.
- 1924 New constitution, extending the jurisdiction of both Legislative and Executive Councils to the Protectorate; first elections held.
- 1943 Two African unofficial members appointed to Executive Council.
- 1951 New Constitution promulgated, by which the non-official members got the majority in the Legislative Council.
- 1953 Six African ministers appointed.
- 1956 Legislative Council redesignated House of Representatives; franchise extended.
- 1953 Further constitutional advances.
- 1960 Constitutional conference discussed the date for independence in London.
- 1961 Sierra Leone achieves freedom.

* * *

MEETING OF DEVELOPMENT ASSISTANCE GROUP

Aid to underdeveloped countries was the theme of the international discussions which started in London on March 27, 1961, between representatives of Belgium, Canada, the Federal Republic of Germany, France, Italy, Japan, the Netherlands, the United Kingdom, and the United States.

Representatives of these countries met as members of the Development Assistance Group (DAG), which was set up in January 1960 as an informal body for consultation between nations providing aid to underdeveloped countries.

Britain's Chancellor of the Exchequer, Mr. Selwyn Lloyd, presided at the open-

ing session, at which the British delegation explained the United Kingdom aid programme and policies. Other members of the group also gave accounts of recent developments in their aid programmes.

The fourth meeting of the Development Assistance Group (DAG) concluded its discussions on March 29 with a communique containing a resolution on "the common aid effort".

The communique said that DAG, conscious of the aspirations of the less-developed countries, and convinced of the need to help them by increasing economic, financial, and technical assistance, had agreed to recommend to the members that they make it their common aim to expand the volume of aid to the underdeveloped countries and to improve its effectiveness.

The resolution stressed that the aid should be provided on as assured and continuing a basis as possible, and agreed also to recommend that a study be made of the principles on which the governments might equitably determine their respective contribution to the common aid effort.

The meeting also adopted a resolution on strengthening DAG which recognized the urgency of improving efforts to assist the less-developed countries, and agreed to request the United States delegation to nominate a chairman who would continue to serve as chairman of the Development Assistance Committee (DAC)—which will be the new name for DAG when the Organization for Economic Co-operation and Development comes into being.

This resolution also agreed to request the French delegation to nominate a vice-chairman on the same terms, and agreed that the chairman shall work closely with the secretary-general of the Organization for European Economic Co-operation, have his office in Paris, and be available to devote substantially full time to the work of DAG, and later of DAC.

The London meeting is seen as marking the beginning of a new chapter in the work of co-ordinating and stimulating aid to the underdeveloped countries, although, of course, no immediate dramatic results are to be looked for.

At the invitation of the Government of Japan, the fifth meeting of DAG will be held in Tokyo in July, 1961.

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AMA DABLAM CLIMBED

Four members of Sir Edmund Hillary's scientific expedition based near the Everest foot climbed the 22,300-foot-high Ama Dablam, according to a message received in Kathmandu on March 19, 1961. The date of the climb was not mentioned. Sir Edmund was not among the successful climbers. The peak is considered as one of the most difficult mountains.

The message said Sherpa Girma Dorji broke his leg after a fall while the team was descending. He was flown to Kathmandu for treatment.

The names of the successful climbers are: Dr. Michal Ward of Britain (leader), American Barry Bishop, New Zealand's Mike Gill and Wally Romanes.

A British expedition in 1959 lost two of its climbers, Mr. M. G. Harris and Mr. G. J. Fraser in their unsuccessful bid to climb the peak.

The Nepal Government took exception to the climbers' violating the Nepalese Government rules which forbid attempts on any Himalayan peak without prior permission. The Government, according to a spokesman, liked to make the punishment "exemplary because such attempts could land Nepal in trouble with its northern neighbour for peaks lying just on the border." The Government, he said, also objected to the publicity given to the climb without it being informed first.

Sir Edmund Hillary arrived at Kathmandu on March 22 from his expedition's camp on the Everest to personally answer the charge levelled by the Nepalese Foreign Office that his colleagues had climbed Ama Dablam without permission. He met the Foreign Minister Dr. Giri next day.

Sir Hillary submitted a written explanation and tendered his personal apology for the lapse of violating mountaineering rules. On March 30, after ten days of consideration of his apology, the Nepalese Government fined Sir Hillary Rs. 2,500 for unauthorised climbing of the mountain peak. He was also given clearance for his Makalu expedition to be undertaken in June this year.

MANNED SPACESHIP LANDED SAFELY IN RUSSIA

* The world's first satellite space ship

"Vostok" (the East) with man on board was placed in a round-the-earth orbit in the Soviet Union on April 12, 1961 and after carrying out successfully the planned studies and the flight programme, the space ship landed safely in the pre-arranged area of the Soviet Union.

The pilot space navigator of the satellite space ship "Vostok" was a citizen of the USSR, Flight Major Yuri Alexeyevich Gagarin.

The launching of the multi-stage space rocket was successful and after attaining the first escape velocity and the separation of the last stage of the carrier-rocket the space ship went into free flight on an orbit around the earth.

According to preliminary data, the period of the revolution of the satellite space ship around the earth was 89.1 minutes. The minimum distance from the earth (at perigee) was 175 kilometres and the maximum (at apogee) was 302 kilometres, the angle of inclination of the orbit plane to the equator was 65 degrees 4 minutes.

The space ship with the navigator weighed 4,725 kilograms, excluding the weight of the final stage of the carrier-rocket.

Bilateral radio communications were established and were maintained with space navigator Gagarin. The frequency of the short wave transmitters on board were 9.019 megahertz and 20.006 megahertz and in the ultra short wave range 143.625 megahertz. The condition of the navigator in flight was observed by means of radio telemetric and television systems.

Space navigator Gagarin stood satisfactorily the placing of the satellite ship "Vostok" into orbit and felt well. The systems ensuring the necessary vital conditions in the cabin of the satellite space ship functioned normally. At 9 hours 22 minutes Moscow Time space navigator Major Gagarin, while over South America, reported: "Flight is proceeding normally, I feel well".

Again at 10 hours 15 minutes Moscow Time space navigator Major Gagarin flying over Africa reported from board of the "Vostok": "Flight is normal. I withstand well state of weightlessness".

HOME AFFAIRS

ECAFE ANNUAL SESSION

Inaugurating the 17th annual session of the Economic Commission for Asia and the Far East (ECAFE) in New Delhi on March 8, 1961, the President of India, Dr. Rajendra Prasad, said that India had decided to participate in the international enterprise to develop the Mekong River Valley and help bring prosperity to four countries in South-East Asia—Laos, Thailand, Cambodia and South Viet Nam.

The Indian Minister for Commerce and leader of the Indian delegation, Mr. Nityanand Kanungo, was unanimously elected Chairman of the session. Mr. Manuel Lim (Philippines) and Mr. Moikarto Notowidigdo (Indonesia) were elected Vice-Chairmen.

Twenty-four member-countries and four associate-members of the organization sent delegations. Eleven other countries participated in a consultative capacity and a large number of specialized agencies of United Nations and intergovernmental and non-governmental organizations sent Observers.

In his inaugural address, Dr. Rajendra Prasad called for efforts to develop fully the inter-change of goods and services among the countries of Asia and said that, in the past, trade within the region had not been large for various historical reasons, and political and ideological differences in the present day made regional integration difficult.

The question of Laotian representation at the ECAFE session provided a brief interlude of political controversy at the inaugural meeting.

As the delegates completed the election of the Chairman and the two Vice-Chairmen and proceeded to adopt the agenda, the Deputy Minister in the Soviet Ministry of Foreign Affairs and leader of the USSR delegation. Mr. G. M. Poushkin, stated that "the group of persons" present at the session on behalf of Laos could not represent that country.

The Chairman, Mr. Nityanand Kanun-

go, intervened to rule out "political recriminations" and referred the question of Laotian representation to the Credentials Committee for examination and report to the plenary session.

The inaugural meeting also heard two statements on the economic situation in the Asian region by Mr. Phillippe De Seynes, U.N. Under-Secretary for Economic and Social Affairs, and U Nyun, Executive Secretary of ECAFE.

Mr. De Seynes pointed out that the intra-regional trade of the ECAFE countries seemed to be falling. The main cause for concern in the situation was that the decline perhaps reflected a lag in production and purchasing power. He said that in an effort to close the gap no removal of tariff protections should be attempted nor ineffective industries established.

The Executive Secretary, U Nyun, reported to the session that the year 1960 had recorded some improvement for the region, but the rate of progress was not as high as in 1959. Agricultural and industrial production had increased and export earnings were higher, but as a whole "the year ended worse than it began."

During the four-day debate on the Survey—from March 8 to 11—Asian countries expressed the common desire for regional economic cooperation.

At the end of a four-hour debate on March 13, the Commission adopted the report of its Committee on Trade, which, among other things requested the ECAFE Secretariat to keep the European Common Market, the European Free Trade Association and the Latin American Common Market under "continuous study."

The report reviewed trade trends and policies in the ECAFE region and suggested that the industrial countries should take measures to help the countries of Asia to increase their exports.

On March 14, the ECAFE session unanimously adopted a resolution sponsored by 13 countries calling for a high-level meeting to review the progress so far made

in implementing the Asian highway project of ECAFE and to mobilize financial and technical resources for its completion.

The same day (March 14) the ECAFE session adopted the report of the Committee on industry and natural resources. The report said that the ECAFE region had taken important steps along the road of industrial development during 1960 and could, through regional co-operation, improve production, expand limited markets and make fuller use of available resources.

On March 16, the ECAFE session urged the member-countries to take full advantage of community development as an instrument of promoting economic and social progress and to promote land reforms and the co-operative movement. A resolution to this effect was adopted unanimously after a discussion in which several speakers stressed that in an agricultural economy like that Asia community development could play a large part in promoting economic progress.

Later, on March 16 the Commission discussed the activities of ECAFE in the field of water resources development, with the Mekong River Valley Project figuring prominently.

A suggestion by the Executive Secretary, U. Nyun, that high-ranking economic and social planners of Asian countries should meet in a Working Group in 1962 to explore the scope of regional economic co-operation was adopted by the ECAFE session on March 17.

At its sitting on March 18, ECAFE endorsed the decision of its parent body—the Economic and Social Council (ECOSOC)—to decentralize economic and social work and strengthen the Regional Commissions.

With the adoption of this resolution, the 17th session of ECAFE concluded consideration of all its substantive agenda items.

ECAFE concluded its 13-day session on March 20 after adopting its report to the Economic and Social Council.

It was decided that the next ECAFE session (1962) would be held in Tokyo. An invitation from the Philippines to hold the 1963 meeting in that country was also accepted

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INDIA'S FIRST AIRCRAFT CARRIER

The former British aircraft-carrier

Hercules, which was originally launched in 1945 and has now been refitted as the new flagship of the Indian Navy, was commissioned and renamed **Vikrant** at a ceremony in Belfast, Northern Ireland, on March 4, 1961. The ceremony took place at the Belfast shipyards of the builders, Harland and Wolff.

The **Vikrant** was commissioned by her new master, Capt. P. S. Mahindroo, in the presence of the Indian High Commissioner, Mrs. Vijaya Lakshmi Pandit; Britain's Fourth Sea Lord, Vice-Admiral John M. Villiers; and the Civil Lord of the Admiralty, Mr. C. I. Orr-Ewing, M.P. The ship was handed over on behalf of the British Government by the Civil Lord of Britain's Admiralty.

Mrs. Pandit gave an address in reply to a speech by Vice-Admiral Villiers; then there was an invocation in Sanskrit to Varuna by the Naval Adviser to the Indian High Commissioner in London, Capt. J. D. Mody.

The simple commissioning ceremony included the raising of the Indian Naval Ensign and the Indian National Flag over the ship, followed by the playing of the national anthems of India and Britain.

Aircraft of 300 Squadron, which were being trained in England before being posted to the carrier, flew past in salute.

The **Vikrant**, first aircraft carrier of the Indian Navy, has a displacement of 19,550 tons when fully loaded. She is 700-foot long, 128 feet wide at its broadest point, and will have a peacetime complement of 1300 officers and men.

As the **Hercules** in wartime, she was laid down at the shipyards of Harland and Wolff in October 1943, and launched just two years later. Work on her was suspended in May the following year, and resumed in April 1957, when she was purchased by the Indian Government.

Since then the ship has undergone a complete refit and modernisation by a well-known ship-building firm at Belfast. On the operational side, she is being fitted out with the angled deck, catapult landing gear, mirror sights etc. In so far as habitability and comfort are concerned she is being fitted out to the latest concept of furnishing, lighting and the provision of space and labour-saving devices. Both operationally and from the aspect of living

conditions she will be the pride of the Indian Fleet.

Her most important armament will be the aircraft she will carry. As an initial outfit, she is equipped with a squadron of Seahawks, fighter-bomber aircraft, and a squadron of Breguet Alize, reconnaissance and anti-submarine aircraft.

After carrying out various trials to prove her machinery and equipment, the VIKRANT will sail for the Mediterranean, having embarked her squadrons, in July. On arrival at Malta she will carry out an intensive work-up programme with Units of the Mediterranean Fleet based on that port. On completion of this programme, at the end of which she should be a fully operational unit, she will sail for India to join the Indian Fleet. She is expected to arrive in India in September this year.

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INDO-PAK CULTURAL CONFERENCE

Inaugurating a three-day Indo-Pakistan Cultural Conference in New Delhi on March 30, the Prime Minister, Shri Nehru, said that the problems and controversies between India and Pakistan were caused by the strange work of history. It was, therefore, of the utmost importance to adopt an indirect approach to a solution of those problems. Our closeness to each other and almost our identity in many ways—our background history, language, geography and cultural and other bonds—were basic factors, which could not be wiped out by merely getting angry or our shouting at each other. The Indo-Pakistan Cultural Conference, he said, could not solve all our problems but it could help in creating a friendly atmosphere. He would therefore call upon the writers and other people in the cultural field to give the right lead even if politicians behaved or misbehaved.

The Prime Minister suggested four ways of approaching their deliberations. One was the aspect of creating the right atmosphere. The second was that they had to keep in mind that the controversies and problems between their countries had to be settled for the good of both, however, long it might take. The third point to be kept in mind was that they should agree that every problem should be settled in a peaceful way. And fourthly, both countries should try to create an atmosphere of friendliness.

Over 40 delegates from Pakistan including writers, poets, historians, painters, artists, professors and research scholars attended the Conference.

Addressing the concluding function of the Conference, the Vice-President, Dr Radhakrishnan said true artists break with the past and build for the future. India he said, was attempting to build a world without barriers or frontiers where there would be no distinctions of caste or creed, race or religion. Both India and Pakistan he went on, were seeking the same goals and their ultimate aspirations were fidelity to civilisation, dignity and fraternity.

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JALLIANWALA BAGH MEMORIAL

The President, Dr. Rajendra Prasad unveiled on April 13, the Martyrs Memorial at Jallianwala Bagh in Amritsar. Named the "Flame of Liberty", the Memorial stands at the site where, 42 years ago, on the 13th of April, British troops under General Dyer fired nearly 1,700 rounds on a crowd assembled there for a public meeting. In the firing, 379 people were officially reported killed and 1,200 injured. The main memorial is a 45-foot high pylon carved out of red sandstone and granite. In the Bagh 379 cyprus trees have been planted in memory of those killed. The old Martyrs Well, into which several people fell while trying to escape from the bullets, as well as bullet holes on the walls surrounding the place have been preserved.

Inviting the President to unveil the new memorial, the Prime Minister Shri Nehru, who is Chairman of the Jallianwala Bagh Memorial Committee, said it reminded the people of the basic necessities of unity and emotional integration and maintenance of freedom. He said if they kept this ideal before them and subordinated all their selfish interests to national unity, no foreign power could cast an evil eye on India.

The President, Dr. Rajendra Prasad, in his speech said for the maintenance of freedom and the future of the nation all communities should maintain unity. The President said the memorial should continue to inspire the nation to higher sacrifices for economic emancipation now that political freedom had been achieved.



HOCKEY

Gold Cup Hockey Tournament

Madras Engineering Group, of Bangalore, won the Bombay Gold Cup Hockey tournament final at the B.P.H.A. Stadium, Bombay, on April 16, defeating the I.H.F. President's XI by two goals to nil in their third meeting. They had won the Aga Khan Tournament in 1957.

Aga Khan Hockey Tournament

President's Eleven took a generous slice of clever, controlled hockey, mixed it with a noggin of speed and garnished the result with a sprinkling of opportunism to score a meritorious victory over a much-improved, fighting Madras outfit in the replayed final of the 66-year-old Aga Khan Hockey Tournament at the flood-lit stadium of the Bombay Provincial Hockey Association on April 23. The first meeting between these two teams on April 22 ended in a goalless draw.

Beighton Cup

Central Railway won the Beighton Cup final defeating Punjab Police by two goals to one at Calcutta on May 9.

The Railway led 1-0 at the interval and after full time the scores were one-all. It was during the extra time that the Railway scored the winner.

Eisman scored both the goals for the Railway while Daishan found the Punjab Police goal.

TENNIS

Australia-India Test Series

Third Test: Australia won the rubber in the current series by two-nil at Madras when they beat India by three matches to two in the third and final tennis Test on the hardcourts of the Corporation Stadium on April 17.

The visitors had already won the second Test at Delhi while the first at Calcutta had ended in a draw owing to fading light.

Playing remorseless, power tennis, national champion Ramanathan Krishnan, put India, who were trailing 1-2, on level

terms when he swept Fred Stolle off his feet in straight sets in 57 minutes at 6-2, 6-2, 6-2, in the first match of the reverse singles. But young Mukherjee, good only in patches, lost the last key match to Robert Hewitt in straight sets, enabling Australia to clinch the issue. Hewitt won 6-3, 6-3, 8-6.

Eastern Zone Davis Cup

True to expectations, India recorded a convincing 4-1 victory over Japan in the Eastern Zone Davis Cup final at the Delhi Gymkhana Club courts on May 8.

This was for the third time that India triumphed over Japan, having beaten them in 1956 and 1959.

Leading 2-1 at close of play on May 7, national champion R. Krishnan whipped the Japanese ace, Atsushi Miyagi, in straight sets 6-4, 6-1, 6-4 in the first singles encounter of the day to clinch the winning 3-1 lead for his country. Thereafter, Akhtar Ali, who took the place of Jaideep Mukherjee in the last singles against Osamu Ishiguro, justified his substitution by prevailing over Japan's second-ranked star after a two-hour struggle. Akhtar won 4-6, 6-4, 6-0, 2-6, 6-4 in a game of fluctuating fortunes.

India have thus qualified to meet the winners of the American zone in the Inter-Zone Davis Cup.

As usual, the Indian ace took time to warm up. But once he got into the strides, there was no stopping Krishnan. He relentlessly employed all potent weapons in his rich repertoire of strokes—sliced underhand volleys, well-angled deep drives, delectable passing shots on both the flanks and those adroit net-drops. His magic touch was a delight to behold. It was Krishnan at his best.

BRIDGE

World Bridge Championship

Italy won the World bridge championship when the final round matches concluded at Buenos Aires on April 23, scoring 119 points. The United States were second. Scores: Italy 382; the U.S. 263.

France took the third place by defeating Argentina 387-339. It was the fourth time that Italy won the world title.

BOXING

World Light-weight Boxing Title

America's Joe Brown retained his world lightweight boxing title when he outpointed Dave Charley, the British, European and British Empire Champion at Earl's Court at London on April 18.

Dropping his defence and taking Brown's stinging punches Charley vainly tried to place the K.O. Punch. He shook the champion on several occasions, but the ring-crafty veteran moved out of trouble and continued to build up points with blows that found their mark to give him an undisputed victory.

RECORDS

World Track Record

Basic Heatley, the British holder of the international cross-country title, set a world track record for 10 miles at Hurlingham at London on April 15.

Running in the Amateur Athletics Association championship, he clocked 47 minutes 47 seconds. The previous record was 48 mins 12 secs by Emil Zatopek, of Czechoslovakia, in 1951.

World Featherweight Record

Chen Ching-kai, 25-year-old Chinese weightlifter, set a world featherweight record for the jerk with a lift of 148.5 Kgs in the national championships at Taiyuan on May 8.

World 100-yard Record Equalled

Dennis Johnson, Jamaica's piston-legged sprinter, tied the world record in the 100-yard dash for the fourth time this season, when he won the event in 9.3 seconds during an all-comers meet in California on May 5.

Johnson, who had been the only sprinter to match that time on three occasions, sprinted home a good two yards ahead of Willie White, of the Santa Clara youth village.

SPORTS INFORMATION

Indian Team will tour West Indies

The West Indies Cricket Board announced on April 13 that the Indian cricket team will tour the Caribbean islands in January next year.

The announcement scotched rumours

that the Indians would call off the proposed tour because of differences over the itinerary. Australia was mentioned as a possible replacement.

Next World T-T Tournament

The next World Table Tennis Championships will be held in Czechoslovakia, probably Prague, in 1963, the International Table Tennis Federation decided on April 14.

The 1965 Championships will be held in Yugoslavia and the 1967 tournament in Australia, the Federation's President, Mr. Ivor Montague, announced.

The International Federation also announced the overall classification for Swaythling and Corbillon Cup team events.

National Games at Jabalpur

Jabalpur has been selected as the venue for the 1962 National Games.

The Madhya Pradesh Olympic Association, with its headquarters at Jabalpur, had been granted affiliation by the Indian Olympic Association.

Jim Laker Sacked

Jim Laker, former Surrey and England off-spin bowler, has been sacked from his £50 a match job as professional to the North Staffordshire League Club, Norton.

The reason he wanted five Saturdays off, to report the England-Australia Test series, this summer.

New professional for the club will be West Indian Test cricketer Peter Lashley.

Sant Singh Appointed Director

Lt-Gen Sant Singh has been appointed Director of the National Institute of Sports at Patiala.

Gen. Sant Singh will take over charge in June from Mr. M. K. Kaul, who tendered his resignation recently.

Worrell Not To Retire

Frank Worrell, who led the West Indies against Australia in the historic Test series this winter, has decided against retirement in the near future.

Worrell said at Kingston on April 20, that he would captain the West Indies in the Test series against India next winter if invited to do so by the West Indies Cricket Board of Control.

Rajkumari Amrit Kaur resigns

Rajkumari Amrit Kaur is understood

to have resigned from the presidentship of two national sports federations—the Badminton Association of India and the Table Tennis Federation of India.

Her resignation has been necessitated by the stipulation of the All India Council of Sports that none of its members is to be connected with any national sports federation.

World T-T Rankings

Indian champion Sudhin Thackersey has been classified for world table tennis seeding purposes, according to an announcement of the International Table-Tennis Federation.

Thackersey is the first Indian to be seeded in a world ranking list.

The I.T.T.F. classification is done primarily on the basis of performance in the World Championships and also on the basis of a player's performance during the year if that player has been unable to participate in the World Championships.

According to the announcement Thackersey figures between numbers 23 and 27.

The following is the classification of players:

Men: 1. Chuang Tse-Tung (China); 2. Li Fu-Jung (China); 3. Hsu Yin-Sheng (China); 4. I. Ogimura (Japan); 5. Jung Ko-Tuan (China); 6. K. Kimura (Japan); 7. Chang Shiu-Lin (China); 8. Yang Jui-Huan (China); 9. Z. Fencik (Hungary); 10 to 14. Hoshino (Japan), Hu Tao-Pen (China); T. Murakami (Japan), F. Sido (Hungary); Tan Cho-Lan (China); 15 to 18. K. Miki (Japan), M. Peterfy (Hungary), G. Shibutani (Japan), Wang Chuan-Yao (China); 19 to 22. H. Alser (Sweden), U. Costa (Brazil), T. Larsson (Sweden), V. Markovic (Yugoslavia); 23 to 27. G. Averian (USSR), K. Freundorfer (Gfr.), I. Harrison (England), Lee Dal Joon (Korea), S. K. Thackersey (India).

Women: 1. Chiu Chung-Hui (China); 2. E. Koczian (Hungary); 3. Matsuzaki (Japan); 4. K. Itoh (Japan); 5. M. Alexandru (Rumania); 6. Sun Mei-Ying (China); 7. Wang Chien (China); 8. Han Yu-Chen (China); 9. A. Simon (Gfr.); 10. Cho Kyng Cha (Korea).

Latif Announces Retirement

Shaikh Abdul Latif, India's olympic full-back announced his retirement. He

will, however, play for his club, the Caltex. Latif told that his decision to retire from playing in major tournaments, was that promising talents should find their places and given encouragement.

Indian Wanderers To Tour New Zealand

Indian Wanderers, an Indian Hockey team, will leave India in May for New Zealand for a tour of two months. Udam Singh, Olympic inside left, will lead the team. Besides, Udam Singh, three more Olympic players will be included in the team. The team will play 20 matches including **three tests**. The following players have been selected for the team:—

Goal—Gajendra Singh (U.P.) and Inderprakash (Delhi);

Backs—Panthpal Singh (Punjab) Jaman Lal Sharma (U.P.), Gurabax Singh (Bengal);

Half-Backs—Deshmukh (Services), K. diresan (Madras), Mohanlal (Delhi), Gurjit Singh (Punjab);

Forwards—Madanniohan (Punjab), Gurdeb Singh (Punjab), Harbindar Singh (Punjab), Udam Singh (Punjab) Capt. Tompo (Services), Darsan Singh (Punjab) Bandu Patil (Services);

Reserves—Nagraj (Mysore), Gurjit Singh (Punjab).

Armin Hary To Retire

Germany's track star Armin Hary winner of 100 metres in the Rome Olympics, announced his retirement on May 10 from competitive sport.

He said that the main reason for his decision was an injury to his knee caused by an automobile accident last November.

Test Cricket Again in Chepauk

Test matches will go back to Chepauk, the age-old venue for big cricket, in the near future.

The Madras Cricket Association is planning a modern stadium on the hoary grounds of the Madras Club at Chepauk, traditional home of Madras cricket.

Chepauk first became an international arena in 1927 when the former Sussex cricketer, A. E. R. Gilligan, brought his M.C.C. team on a tour of India. Ever since all Test matches were played at the Chepauk ground till 1954. The venue then shifted to the Corporation Stadium. It has now been decided to return to Chepauk again in about three years' time.

Indian Likely to Represent Australia

A Hindu, now living in Sydney, is likely to represent Australia at the World Wrestling Championships to be held at Yokohama, Japan, from June 24 to 28.

He is Buck Samri who is the current Australian champion in the Graeco-Roman style.

A big man—he weighs 21 stone—Buck Samri is extremely strong. In the ring he displays a thoroughly scientific knowledge of wrestling and is very methodical.

The Australian Amateur Wrestling Association has notified him that he has been tentatively selected for the trip.

Indian Council of Sports Reconstituted

The Government of India has reconstituted the All-India Council of Sports for a period of two years with effect from May 3, 1961 with the Maharaja of Patiala as President.

The council, which is an advisory body, advises the Government of India on all matters concerning sports and games and acts as a liaison between the national sports federations and associations and the Government.

Other functions of the council include granting recognition to such sports organizations established at the national level as it might deem worthy of recognition and recommending to the Government the quantum of assistance to be given to sports bodies.

National Sports Institute Inaugurated

The National Sports Institute was formally inaugurated at Motibagh Palace, Patiala, on May 7, by the Union Minister for Education, Dr. K. L. Sharmali, who expressed the hope that it would promote national spirit among the country's sportsmen.

A Unique Score Board

Modi Stadium at Green Park, Kanpur, the venue for Test cricket matches claims to have a score board which is unique in the world.

The score board, designed by Mr. S. M. Bashir, Secretary-General of the Test Managing Committee, has a section which shows the result from every ball bowled in one six-ball over. Six windows, indicated by six green bulbs placed in the shape of letter 'M' show what resulted from a ball

bowled. Blanks indicate that no run had been scored and figures one to six indicate the number of runs scored off that ball. If a wicket falls it is also indicated by the letter 'W' and maiden over is indicated by lighting all the bulbs to trace the letter 'M' as in a score book.

In addition the score board also shows the bowling analysis of the bowlers after each over bowled by them besides other features like indicators to spot the fielders.

Benaud Writes a Cricket-Book

Australia's Test captain, Richie Benaud, has broken the tradition of most great cricketers by writing a book while he is still an active Test player.

In his "Way of Cricket," which is having good sales in Australian book shops, he makes a plea to cricket administrators to leave the laws of cricket alone.

"I appreciate that every move made by administrators in recent years has been solely directed towards the good of the game, but frankly, have the changes in the laws been beneficial to cricket?" he asks.

He states cricket could have done without many of the changes to the rules in recent years, and most of the problems of modern cricket stem from the revision of the L.B.W. rule in 1935 which makes it possible for a batsman to be given out to a ball pitched outside the off-stump, so long as the ball is moving across in the direction of the stumps when it hits his body.

He states this revision continues to give off-spinners an advantage over leg-break bowlers, and has succeeded only in encouraging bowlers to concentrate on the off-side of the wicket. He advocates a return to the old rule.

"Young men who previously saw off-spinning as the easy way out would be persuaded in greater number to bowl leg-breakers. That in turn would brighten up the game, because it is commonly accepted that more action takes place when a wristy spinner is bowling," states Benaud.

He also advocates the retention of the law stipulating that a new ball can be taken after 200 runs—he does not want this rule to be subject also to the number of overs bowled.

Concerning the preparation of wickets, he considers committees in recent years have been guilty of interfering far too

much in ground preparation. "If the groundsmen were told merely to prepare good fast wickets, we would generally get good fast wickets," he states.

He urges the administrators to stop interfering with the laws of cricket and concentrate on telling the players to get on with the game. "Action should speak louder than words in cricket," he states.

1964 Olympic Games Dates

The 1964 Olympic Games will be held in Tokyo from October 11 to 25, the Organising Committee decided on May 13.

Earlier, the Committee had considered holding the Games in June. It was decided to delay them until October because June is in the rainy season.

World's Strangest Golf Course

The world's strangest golf course—with square holes a foot across—has been built by a Royal Air Force sergeant, the Air Ministry announced in London on May 11.

This earthly paradise for inexpert putters is at Sharjah, a small RAF station on the Persian Gulf.

Its architect is a Scot, Sergt. David Ross, a 15-handicap golfer and a physical fitness instructor.

Sharjah has no grass, only arid sand which makes the ball take many unpredictable changes of direction on the greens.

Despite the size of the holes, the Air Ministry reported, the airmen often take three strokes in putting and only one man has managed a hole in one.

Botvinnik's Unprecedented Feat

Mikhail Botvinnik regained the World chess championship on May 12.

The 50-year-old former champion won back the title he lost last year to a man half his age, Mikhail Tal.

Botvinnik's victory came after the 21st game of the scheduled 24-game championship series.

In regaining the world chess title from Mikhail Tal, Mikhail Botvinnik performed a feat unprecedented in the annals of world chess. For, this is the fifth time Botvinnik has reclaimed the top place in world chess after having lost it.

Botvinnik won the chess crown for the first time in 1948 when, in the match of the challengers, he outplayed Smyslov,

Keres, Reshevsky and Euwe to win the title. Three years later, he lost the crown to Smyslov but in 1958 he came back to beat his Arch rival by 12.5 points to 10.5.

The 49-year-old Power Engineer and a Doctor of Sciences became a chess master when he was only 16. At 24 he was a grandmaster. In the course of his 35-year chess career, Botvinnik won first places in 30 national and international tournaments.

FORTHCOMING EXAMINATION

Indian Military Academy Examination, November, 1961

The Union Public Service Commission will hold an examination at Allahabad, Bangalore, Bhopal, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Jammu, Madras, Nagpur, Patiala, Patna, Shillong and Travandrum on 9th and 10th November, 1961, for entry into the Indian Military Academy.

Age Limits: Candidates must have been born not earlier than 2nd July, 1941, and not later than 1st July, 1944. These age limits can in no case be relaxed.

Qualifications: Intermediate or equivalent. Applications from candidates who have appeared or intend to appear at Intermediate or equivalent examination acceptable provisionally.

Application forms and full particulars obtainable from Secretary, Union Public Service Commission, Dholpur House, D.H.Q. P.O., New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. Candidates must clearly state on money order coupons "Indian Military Academy Examination, November, 1961," and also give their names and full postal addresses in block letters. Postal orders or cheques or currency notes will not be accepted in lieu of money orders. Application forms and connected papers are also obtainable free from the nearest Recruiting Office, Military Sub-Area Headquarters or National Cadet Corps Unit. Only unmarried male candidates can apply for admission to this examination. Completed applications must reach the Union Public Service Commission by 10th July, 1961 (24th July, 1961, in case of candidates abroad).

Appointments, Awards etc.

APPOINTMENTS

The Government of India decided on April 13 to establish diplomatic relations with the Republic of Senegal at Embassy level and to appoint **Dr. Nagojo Vasudev Rajkumar**, Ambassador to that country.

Ajoy Kumar Ghosh was re-elected General Secretary of the Communist Party of India (CPI) on April 16.

Mr. Maitrika Prasad Koirala, Nepal's first popular Prime Minister after the overthrow of the Rana regime in 1951, was officially named the country's Ambassador to U.S.A. and permanent delegate to the U.N. on April 17.

Mr. Hardwari Lal was appointed on April 17 as the Vice-Chancellor of Kurukshetra University for three years.

The new American Ambassador to India, **Prof. John Kenneth Galbraith**, presented his credentials to the President in New Delhi on April 18.

Former Netherlands Foreign Minister, **Dirk V. Stikker**, was formally nominated on April 18 as the new Secretary-General of NATO.

Mr. Uma Shankar Dikshit (Congress) was elected on April 20 by the members of the U.P. Vidhan Sabha to fill the vacancy in the Rajya Sabha caused by the death of **Mr. Govind Ballabh Pant**.

Mr. J. S. Basur was appointed on April 20 as Chairman of the Punjab Public Service Commission.

Mr. Shiva Shankar Sinha, son of the late **Dr. S. K. Sinha**, was declared elected to the Bihar Assembly from the Shekhpura Constituency on April 25.

Prof. Mangaldeo Shastri was appointed interim Vice-Chancellor of Varanasi Sanskrit University on April 25.

The Government of India decided on April 25 to establish diplomatic relations with Sierra Leone and proposed to accredit **Mr. Khub Chand**, India's High Commissioner in China, concurrently as India's High Commissioner in Sierra Leone.

Mr. R. D. Varma was appointed on April 30 as member of the Oil and Natural Gas Commission.

The President approved on May 2, the appointment of **Mr. B. N. Jha** as Chairman of the UPSC, in succession to **Mr. V. S. Hej-**

radi, whose tenure of office expires on December 10.

The Government of India decided on May 5 to establish diplomatic relations with the Republic of Somalia at embassy level and to appoint **Mr. M. K. Kidwai**, Commissioner-designate in Mauritius, concurrently as Ambassador to Somalia.

Lieut.-General P. N. Thapar took over on May 8 as the Chief of the Army Staff with the substantive rank of General. He succeeds **General K. S. Thimayya**, who has retired.

Mr. Charles R. Swart, former Governor-General, was elected on May 10 as the first President of the Republic of South Africa.

Mr. C. S. Jha, India's Permanent Representative to the U.N., was unanimously elected Chairman of the Committee of Contributions on May 10. (Committee of Contributions is a body charged with the task of reassessment of the slab of contributions to the U.N. for the next three years. This committee of experts meets in closed sessions and its members are elected on personal basis.)

Mr. Justice S. Ramachandra Ayyar was sworn in on May 9 as Chief Justice of the Madras High Court.

Dr. Koto Matsudaria was appointed Ambassador of Japan in India on May 14.

Dr. Jagan Nath Khosla, Indian Ambassador-designate to Yugoslavia, was concurrently appointed on May 14 as ambassador of India to Bulgaria, with residence in Belgrade.

AWARDS

Mr. J. B. S. Haldane, was awarded the Kimber medal for his work in the science of genetics by the National Academy of Sciences, Washington.

Irish playwright-novelist **Samuel Beckett** and Argentine writer **Jorge Borges Moniay** won the first "international publisher's prize". The two writers will split the \$10,000 prize.

President Kennedy awarded on May 6 the Civilian Space Agency's Distinguished Service Medal to **Commander Alan Shepard** for his space flight. On May 8, he was awarded the hero's medal also.

Mr. K. Ishnamachari Balaraman, deputy-

editor-designate of "The Hindu" of Madras, was named on May 9 as the first recipient of a newly-instituted award by the journalistic fraternity, Sigma Delta Chi, for excellence of United Nations reporting. The award carries with it a 500-dollar cash prize.

VISITORS

A party of 16 officers of the National Defence College of Canada, led by Commodore N. G. Stirling, arrived in New Delhi on April 14 on a 10-day visit to India.

Mr. Sargent Shriver, Director of President Kennedy's Peace Corps, arrived in New Delhi on April 30 for a five-day visit.

President Kennedy's special roving envoy, **Averell Harriman**, arrived in New Delhi on May 5 for talks on the Laos problem with Prime Minister Nehru.

OBITUARY

Mr. Bimal Chandra Sinha, 42, West Bengal's Minister for Land and Land Revenue, died in Calcutta on April 17.

Mr. K. M. Sethi Sahib, 62, Speaker of the Kerala Assembly, died of a heart-attack in Trivandrum on April 17.

Maharaja Hari Singh (65) of Jammu and Kashmir died in Bombay on April 26.

Gary Cooper, eminent Hollywood actor, died in Hollywood on May 13.

MOUNTAINEERING

The conqueror of Everest, Tensing Norkay, said recently at Ambala that mountaineering as a sport was making good progress in the country. He refuted the suggestion that mountaineering was risky and hazardous and said that the risk involved in it was no worse than that in car driving or flying. The Everest hero, who was addressing a large gathering of sports enthusiasts, said mountaineering would help shape the "problem" young men into courageous, disciplined and useful citizens, imbued with a high sense of team work. Mountaineering, he said, also contributed to longevity and sound health.

* * *

We must act as one nation, not united by extraneous circumstances, but united by a greater force, our own determined will.—**Mahatma Gandhi**

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NEWS Diary



APRIL

13. KMT China's first atomic reactor, built at the Hsing Hua University Institute of Science, went into operation.

15. Unidentified planes bombed and blew up an airfield ammunition dump near Havana (Caba) and Santiago De Cuba.

The President of Azad Kashmir, Mr. K. H. Khurshid enforced a law which debars all political rivals from contesting the presidential elections against him in August next.

16. The Governor of Andhra Pradesh, Mr. Baimsen Sacchar, launched the 12,300-ton liner, the "State of Panjab", built for the Eastern Shipping Corporation in the Hindustan Shipyard.

The first diesel locomotive known as "Suri transmission" manufactured by M.A.K. of West Germany, arrived in Bombay.

17. Mr. Selwyn Lloyd, Chancellor of the Exchequer, presented to the U.K. Parliament a £6,000 million budget--the highest in the nation's history.

Fighting broke out in the streets of Havana, after anti-Castro forces had invaded Cuba. A state of emergency was also proclaimed throughout the island.

18. The Ceylon armed forces took over control of the Northern and Eastern Provinces of Ceylon which was placed under a state of emergency yesterday.

55-year-old Maharaja Vikramisingh, former ruler of Gondal, was arrested in Bangalore following an alleged attempt made by him to hijack India's first supersonic aircraft being developed at the Hindustan Aircraft factory.

Italy was elected by the General Assembly to fill the vacant seat on the U.N. Economic and Social Council.

19. Further Budget concessions were announced by the Union Finance Minister.

President Kennedy in reply to a threat from Russia told them that the U.S. "intends no intervention" in Cuba and made it clear that any Soviet intervention would be met with force.

The Colombian Army took over the capital city of Bogota as a security measure following communist and Castro demonstrations there.

20. Dr. Fidel Castro's Government claimed total victory over the forces which invaded Cuba on April 17.

21. The West German Federal Republic agreed to extend the term of the 100-million deutschmark loan embarked for India's Third Plan from 15 to 20 years.

New small-scale landings were reported in Cuba.

22. A Junta of French retired Generals, including Ex-Generals Raoul Salan, Maurice Challe, Andre Zeller and Edmund Jouhard, seized Algeria in a bloodless coup in what they described as a bid to "save Algeria".

The General Assembly rejected a U.S.-backed bid to refer the dispute with Cuba to the Organisation of American States (O.A.S.).

23. President Charles De Gaulle took over absolute powers in France to meet the threat of civil war posed by the army insurrection in Algeria.

24. Mr. Pravinchandra Bhanjdeo, the deposed ruler of Bastar, was released from jail at Narsingarn, where he was lodged after his detention under the Preventive Detention Act on February 11.

Britain and the Soviet Union jointly addressed to all military authorities, parties and organisations in Laos to call to a cease fire.

Guinea severed all diplomatic and private business relations with Israel.

The United Arab Republic struck oil underwater for the first time in its history, about 125 miles south of Suez.

25. Both sides in the war in Laos accepted the British-Soviet appeal for a cease-fire.

France successfully exploded the fourth atomic bomb at the Reggane testing site in the Sahara.

Mr. Moise Tshombe, the President of

Katanga, walked out of the conference of Congolese leaders in Coquilhatville. But he was arrested the following day by troops of the Congolese Government.

King Baudouin approved a new government of Belgium, headed by M. Theo Lefevre, Catholic Prime Minister, and M. Paul Henri Spaak, Socialist Vice-Premier.

The Lok Sabha passed a Bill delegating legislative powers to the President to enact laws for Orissa on behalf of Parliament till a new legislature is elected in the State.

An agreement designed to develop trade between India and Jordan was signed in Amman.

26. The revolt of the Algerie Francaise generals ended in Algiers.

Large deposits of iron ore were discovered in Ancharahal district near Ahmedabad.

27. Mr. Ronald Ngala, President of the Kenya African Democratic Union, announced the formation of a new Kenya Government.

The first round of exploratory talks on the purchase of West Pakistan natural gas by India concluded in New Delhi.

Sierra Leone was proclaimed an independent sovereign State within the British Commonwealth after 150 years of colonial rule. The Soviet Union recognized Sierra Leone as an independent and sovereign State the same day. (Sir Milton Magai is the first Prime Minister of independent Sierra Leone.)

The U.S. launched a "space telescope" satellite at Cape Canaveral to study radiation mysteries of the universe.

28. The International Commission for Laos was revised in New Delhi under the Chairmanship of Mr. S. Sen. The commission, comprising India (Chairman), Canada and Poland, was set up in Geneva in 1954.

India's first heavy Soda Ash Plant was inaugurated in Sahupuri by Mr. C. B. Gupta, Chief Minister of U.P.

29. The U.N. garrison of 60 Ghanian troops surrendered at the important rail-head of Port Franqui and was disarmed by the Congolese troops.

The three Presidents, Dr. Kwame Nkrumah (Ghana), Mr. Sekou Toure (Guinea), and Mr. Modibo Ito (Mali), signed a Char-

ter in Accra, formally joining the Union of African States.

West Germany granted India a loan of 330 million marks for the Third Plan.

30. The 60,000-ton Supper-carrier Kitty Hawk, world's largest warship, was commissioned at Philadelphia.

MAY

1. India and the U.K. signed two agreements in New Delhi under which the latter would provide a credit of Rs. 53 crores to India.

Tanganyika, the U.N.'s largest Trust Territory in Africa, achieved internal self-government under Julius Nyerere as its first Prime Minister. (Full independence is to follow on December 28.)

Premier Castro of Cuba declared Cuba a socialist country. He said there would be no more elections.

2. The U.S. offered India one billion dollars for the first two years of the Third Plan.

The West Pakistan Government authorized Union Councils of basic democracies to levy tax on birth marriage feasts, house construction and animal slaughter.

3. A cease-fire was ordered in Laos by army Commanders.

4. Pro-Communist Pathet Lao forces ignored the cease-fire in Laos and fired on Government troops.

India and Iran signed a trade pact in Tehran.

A manned U.S. balloon, launched from the "Antietam" attained a record flight altitude of 113,500 feet.

5. America shot its first spaceman, Commander Alan Shepard, in "Lake Champlain" aircraft carrier, 115 miles into space and picked him up from the Atlantic 15 minutes after a successful flight.

The U.S. Government approved of loans amounting to \$57,775,5000 for the second stage of the Sharavathy hydro-electric project in Mysore State.

Mr. Anthony Wedgwood Benn, Britain's "reluctant peer", won for the Labour Party the election in South Bristol.

President Abbe Yvrou of the Republic of Congo ordered the closure of all river and air traffic between his country and the former Belgian Congo as a counter measure against the suspension of the ferry

services between Leopoldville and Brazzaville by President Kasavubu.

6. The Gujarat Research Committee indicated that a rich deposit of mineral wealth including uranium is available in some parts of Chhotaudepur, near Baroda.

The Shah of Iran instructed Dr. Ali Amini to form a new Government for the country.

7. Members of the international Supervisory and Control Commission for Laos, along with military personnel, left New Delhi for Laos.

It was announced in Coquilhatville that President Moise Tshombe of Katanga would be tried for murder and high treason.

8. The pro-Communist Laotian rebels called for a meeting at Hin Heup, 55 miles north of Vientiane, to resume discussions on the cease-fire.

It was announced in New Delhi that three men, including the leader Instructor Lieutenant M. S. Kohli of the Navy, of the Indian expedition to the Annapurna III reached the summit at 4-15 p.m. on April 6. This was their second attempt to reach the summit.

United States Secretary of State Dean Rusk, declared in Oslo that the U.S. intended to maintain its position in West Berlin even if the Russians signed a separate peace treaty with East Germany.

9. The Souphavanna Phouma group and the rebel Pathet Lao held out the threat of refusing to cooperate with the International Control Commission (I.C.C.).

A cyclone of unprecedented fury, accompanied by a 10-foot-high bore, hit large parts of East Pakistan.

A joint sitting of the two Houses of Parliament, the first time in their history, passed by acclamation the Dowry Prohibition Bill, two years after its introduction in the Lok Sabha.

10. The biennial meeting of the North Atlantic Council ended its three-day meeting in Oslo, bringing home to members the need for looking further afield than military containment of communism in Europe.

Three of the five accused in the Pandaranaike assassination case—Mapitigama Buddharakakita Thero, H. P. Jayawardena, and Talduwe Somarama Thero—were unanimously found guilty by an English-speaking jury in Ceylon's Supreme Court.

An Air France Super-Starliner airliner crashed in the Sahara, killing all 69 people aboard.

The first annual report on the working of the Indus Waters Treaty was presented to the Governments of India and Pakistan.

11. Twenty African nations met in Monrovia (Liberia) and declared themselves against the surrender of national sovereignty in a United States of Africa.

The negotiations going on between the Government of India and the ESSO Standard, an American oil company, for exploration of oil in India on a participatory basis broke down.

12. The 14-nation Geneva Conference, scheduled to be held today, failed to open due to the non-arrival of all the delegates. Main difficulty arose over the question of 'who was to represent Laos'.

The third meeting in three months, between Prime Minister Nehru and Akali leader Sant Fateh Singh on the Punjabi Suba issue broke down.

Mr. Tom Mboya, Secretary of the Kenya African National Union, tabled in the Kenya Legislative Council a motion of no-confidence in the new Government formed by the rival Kenya African Democratic Union.

A three-man Ministerial team took control of the secessionist Katanga province, in the absence of Mr. Moise Tshombe.

The Cuban Government 'nationalized' six American film distribution companies.

13. Goan commandos launched a 'do or die' movement to liberate Goa by the end of 1961.

14. The U.S. and Russia agreed to have all the three Laotian delegations—pro-Western, pro-Communist and neutralist—at the 14-nation conference.

The foreign service of Nepal was constituted.

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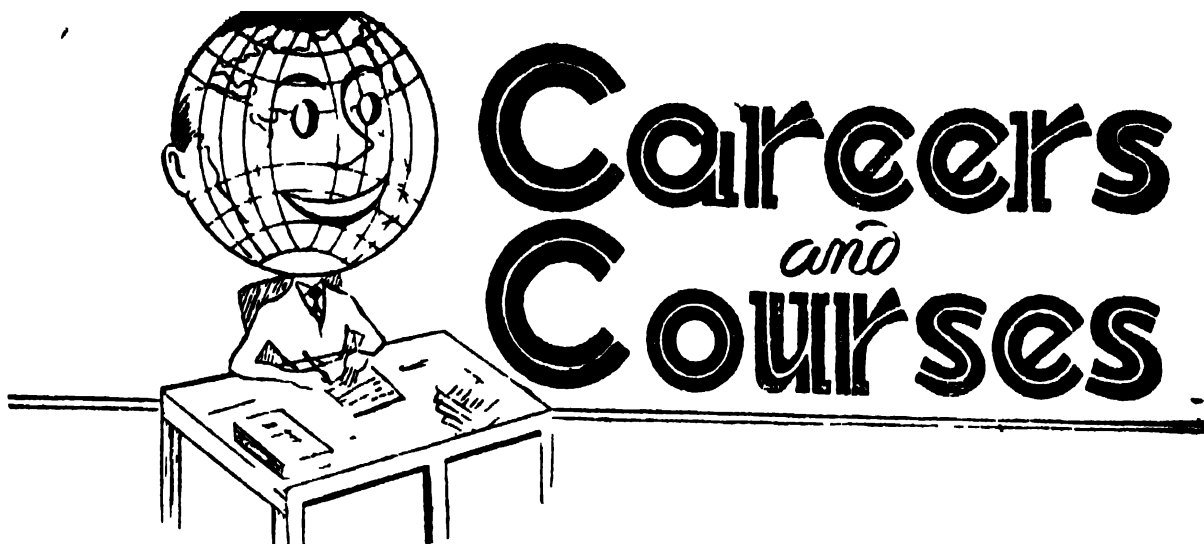
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EDITORIAL

Communalism And National Disintegration

Lately there has been a great deal of discussion in the press and public about the rise of communalism and other disruptive forces in the body politic of India. After sitting tightly with a comfortable majority at the helm of Central and State Governments and conducting the affairs of the nation with a pre-settled programme of unifying India and making it a socialist secular state, the Congress Party has suddenly come to realise that the country is rapidly drifting towards disintegration, and disruptive elements have permeated the ruling party and the administration at all levels. The Prime Minister has been off and on warning the nation against forces of disintegration, such as parochialism, casteism and linguism, but his voice seems to have fallen on deaf ears. Unheeding the fate of the nation and to keep secure their own leadership, the politicians have been nefariously injecting the communal poison in public minds. They have been exploiting the sectarian sentiments and religious emotions of the public for their own gain. Now when the separatist tendencies have reached the danger level and threaten to retard the progress of the country, those very leaders who have been inseminating the seeds of disunity think it imperative to devise ways and means to curb the growth of fissiparous elements.

It is a sad commentary on the Congress rule that after fourteen years of independence the secular Government has been unable to root out communalism in its various forms which is now prevailing in the country. In the pre-independence days the

British encouraged the forces of communalism by creating minority groups based on religious affinities and giving special concessions to one group at the cost of the other. This 'divide and rule' policy naturally kept the two major communities, Hindus and Muslims, hating each other and this hatred occasionally erupted into communal riots.

The communal feelings and suspicion and hatred of each other culminated in the division of India and formation of Pakistan. Free India gave herself a secular Constitution guaranteeing equal rights for all people. The Constitution provides for a single and uniform citizenship for the whole of India. Part III of the Constitution enumerates seven broad categories of 'Fundamental Rights' of the people. The right to equality (Articles 14 to 18) includes equality before the law, prohibition of discrimination on grounds of religion, race, caste, sex or place of birth, and equality of opportunity in matters of public employment. Article 19 guarantees to the citizen his right of freedom of speech and expression, assembly, association or union, movement, residence, acquisition, holding and disposal of property, and the right to practise any profession or to carry on any occupation, trade or business. Freedom of conscience and free profession, practice and propagation of religion for all (Articles 25 to 28) and the right of minorities to preserve their own culture, language and script and to receive education and establish and administer educational institutions of their choice (Articles 29 and 30) are guaranteed by the Constitution.

With so many rights and privileges guaranteed for every citizen it was hoped that communalism would become a thing of the past and India would mould itself into a monolithic secular nation. But with guaranteeing fundamental rights of the citizens, the Congress Government began to make some fundamental mistakes which led the people towards separatist group loyalties. The Government, with a desire to raise the backward classes—the Scheduled Castes and Scheduled Tribes—in the social and economic scale, guaranteed some special concessions for them such as reservation of posts in the administration and seats in the legislatures. This step led to a scramble among even the higher castes to claim the privilege of backwardness in order to become entitled to concessions in educational institutions and public services. The report of the Nagan Gowda Committee on Backward Classes appointed by the Mysore Government has stated that the principle of reservation for these classes was carried to such an extent in Mysore that only three or four castes were left out as not being backward. These left-out 'high' castes should naturally have a grudge against the privileged backward castes. The Government is inadvertently instrumental in sowing seeds of dissension among various castes and thus giving rise to narrow casteism. This malady of casteism is showing symptoms in all states. It has been noted that candidates for election from panchayats to legislatures are mostly chosen, even by the Congress leaders, on caste considerations and the people too tend to vote for a candidate of their own caste instead of one belonging to their political party. Casteism is a very narrow form of communalism which is deep-rooted in the bulk of the population of India. The Government has only perpetuated this evil by reserving concessions for some castes while ignoring the others.

Another big mistake made by the Congress rulers was the reorganisation of states on linguistic basis. This step was presumably taken for better administrative purposes but it gave rise to worst form of disruptive tendencies—regional chauvinism and linguistic fanaticism. Regionalism is manifested in border disputes among neighbouring States on official level and agitation by the people for inclusion of some villages in a neighbouring State in their own State. West Bengal is claiming some

area from Bihar and Maharashtra has put a claim to certain Marhatti-speaking villages in Mysore State. The claim has not been only vocal but the Maharashtrians have been carrying on a sporadic agitation at the border which has resulted sometime in clashes among people of neighbouring States and with the police. There has been disputes on the distribution of river water among different States and this problem has created much bitterness among the people as well as the Governments of the States. Not only are the masses and the illiterate people inflicted with the malady of narrow regionalism but the educated leaders, politicians and even the officials are the victims of this disruptive sentiment. The people have begun to identify themselves as Bengalis, Madrasis, Gujaratis etc. and they seem to have forgotten that they belong to a bigger country called India.

The formation of linguistic States is responsible for creating another disruptive tendency among the people—the demand for bifurcation of bilingual states and creation of new States on language or ethnic basis. After much bloodshed and riots among Maharashtrians and Gujaratis, the Congress Government condescended to bisect the Bombay State into the States of Maharashtra and Gujarat. The people of these two new States had been living for ages peacefully and amicably in the larger Bombay Province but the new wave of linguism had suppressed all their brotherly feelings and they decided to live apart. It can be safely stated that had not the Congress rulers given an initiative to linguistic States, the people would never have thought of narrow linguistic loyalties. Bifurcation of Bombay State was followed by a demand for more new States—the Vidarbha, the Dravidistan, the Panjabi Suba, the Vishal Himachal, Nagaland and the Assam Hill State. Last year the Congress Government yielded to the demand for an autonomous Naga State and Nagaland was created as the sixteenth State of India.

For the last one year the sikhs have been agitating for the bifurcation of the border State of Panjab on linguistic basis. Their initial demand for safeguard of their Punjabi language and Gurmukhi script has been amply met by the Government. Emboldened by the bifurcation of Bombay State and formation of Nagaland, the Sikhs have raised their demand to the formation

of a Panjabi Suba having majority of Sikh population. They had resorted to morchas and hunger strike to force the Government to yield to their demand which is opposed by the rest of the non-Sikh population. Though the agitation has been suppressed by the iron hand of the Government there are indications that it may erupt soon because of the threat of Sardar Tara Singh, the Sikh leader, to go on hunger strike in support of his demand for a Punjabi Suba. This demand has embittered the relations of Hindus and Sikhs, and though there have been no communal riots so far, there is every likelihood of disturbance of peace among the two communities if the feelings run high and the Sikhs persist in their demand to cut out a separate homeland for themselves.

The worst form of linguism was demonstrated in Assam last year where the Bengali minority protested against imposition of Assamese as a State-language. The ensuing riots resulted in making thousands of Bengalis refugees in their own motherland.

Another blunder was committed by the Congress rulers when they formed an alliance with the Muslim League to oust the Communists in the mid-term elections in Kerala State. To kill one evil they created a bigger evil. The Muslim League was the creation of British rulers to fight the Nationalist Congress. The Muslim Leaguers propagated the two-nation theory based on religion and they succeeded in carving out a separate Muslim State—Pakistan—out of India. The partition was accompanied by killing, arson, loot and displacement of millions of persons. After independence the Muslim Leaguers either donned the Congress garb or lay dormant waiting for an opportunity to revive their communal activities. The alliance with Congress in Kerala resuscitated the Muslim League and once again put this communal party in the arena of active politics in India. Now the Muslim League has organised itself again and opened its offices in cities with big Muslim population such as Madras, Bombay, Lucknow, Bhopal, Kanpur, Delhi etc. The Muslim League has been successful in capturing a number of seats in the civil elections in Bombay. With the revival of Muslim League, two other communal bodies, the Jamait Islami and Khaksars, have also revived their acti-

vities. The Jamait Islami aims at establishing Muslim hegemony throughout the world and it does not recognise any geographical boundaries and political divisions like nations as far as the Muslims are concerned. The khaksars were the military wing of the Muslim League. They wore khaki uniform, carried shovels in their hands and paraded in the public places to strike terror in the opposing community. It is said that the Khaksar movement in India has already recruited 30 lakh members and they are holding frequent secret meetings in different cities.

The weak and opportunistic policy of the Congress has been responsible for the revival of communal parties and the old communal feelings among the people, reminiscent of pre-partition days. As though not content with the instigation already given to communalism and disruptive forces, the Congress Party has committed another blunder by blessing the Muslim Convention held in New Delhi on June 10 and 11. There was no need to seek permission from the Congress to hold a communal meeting as under the Constitution every body is allowed the freedom of association, expression and assembly. The clearance certificate was sought from the Congress High Command to give respectability and appearance of nationalism to a purely communalistic convention. It was argued by the sponsors of Muslim Convention that only Nationalist Muslims were invited and those who do not believe in secularism or national unity were ignored. In answer it may be said that were not Liaquat Ali Khan, Abdul Rab Nishtar, Abdul Quayam Khan and a score of other Muslim leaders, whose efforts created Pakistan, nationalists and had been members of the Congress before they changed their party labels? There is no difference between a nationalist Muslim and a communalistic Muslim, and for that matter between a nationalist Hindu and a communalist Hindu, unless he drops the word Muslim or Hindu and thinks himself as an Indian. The aim of the Muslim convention, as explained by its President, was to demand "a proper place for Muslims in the sphere of nationalistic activities and also in enjoyment of their due rights of citizenship and in all the schemes of national planning of social, cultural, educational and economic progress of the country on the basis of healthy traditions of mutual understanding." It was not explained how

the Muslims were debarred from enjoying their rights under the Constitution and not a single instance of discrimination against the Muslims was quoted. The real object of the Muslim Convention was to act as a feeler to note the reaction of the non-Muslims to the revival of Muslim Communalism. The President of the Convention said: "Today the Indian Muslims are generally led away by frustration, demoralisation, and pessimism. It is really very unfortunate that this fifty million population of our country, which is scattered in every corner of our land, is suffering from these feelings with regard even to the safety and security to their lives, properties and social footing." The President did not explain who was jeopardising the safety of lives and properties of Muslims in the country wedded to secularism and whose Constitution guarantees protection to every citizen regardless of religion, race, sex or place of birth. Short of demanding special weightage for Muslims in legislatures, public bodies or other lucrative offices, the Muslim Convention did everything to fan the communal feelings on the pattern of the old Muslim League of unblessed memory. The Muslim Convention injected a new sectarian element in Indian politics and it has set a precedent for other communal or sectarian parties to hold such conventions or their imaginative and unfounded grievances. It has also provided an easy handle to Pakistan for hitting at India's secularism by accusing that the minorities are not well treated and are unhappy and frustrated in India. The Muslim Convention was a camouflage for reviving the old Muslim League tactics. Now the Muslims have got a separate political platform and they will try to bargain their support for number of seats in the forthcoming elections.

The reaction to the demands of Muslim Convention came from two veteran Congress leaders. Dr. Sampurnanand said in a speech on June 12 that the Muslim Convention was meant to show to the outside world that "these people are labouring under some hardship and injustice." The U.P. State Congress President, Mr. Ajit Prasad Jain, said in Meerut on June 14 that the sentiments expressed by several Muslim leaders at the Muslim Convention were damaging. He added that it was absurd to say that just and fair treatment was not accorded to the Muslim minority in the country.

Communalism has been the bane of Indian politics and it had made the life of the people miserable before independence. Partition of the country was the result of rabid religious communalism, which made millions lose their lives and homes. After independence communalism in any form was suppressed but unfortunately it is again raising its head at the time when we need internal unity to meet outside threat to the security of our country and aggression at our border areas. The Congress Party should realise its duty towards the nation and it should have no truck with the Communalists. It should leave its policy of appeasement of the communalists or joining hands with communalist parties for the temporary gain of few seats in the legislatures, in the larger interests of the country. If the biggest secular party in the country drifts towards communalism, then no power on earth can save India from repeating the history of partition of the motherland.

India has successfully completed two five-year plans and has begun the third ambitious Plan for progress and prosperity of the country. If communalism and separatist forces are given free reins, they will not only prove ruinous for the country but also make India a laughing stock before the world. All the honour and prestige which India has won in the international field will be spoiled, all the progress made so far will be marred and the country will lose its hard-won and dearly cherished freedom. Communalism, not only in the form of religious bigotry but also linguistic chauvinism and parochialism, and all disruptionist, separatist and reactionary tendencies harmful to India's progress and interest should be condemned. For the achievement of our socialist goal and material prosperity, emotional integration of all parts and people of India and the strengthening of the unity among all sections of the people, regardless of caste, religion, race or sect, are of utmost and basic importance. It is essential that communalism must be opposed and combated at all fronts and all people, regardless of their party alignments, must act and function unanimously for the social and economic progress of India. Policies which lead to the prosperity of all people should be pursued by all parties and fissiparous leanings must be weaned out from the political parties in the country.

Disintegration : How To Avert It?

By Dr. C.P. Ramaswami Aiyar

It has been said that the present era is one characterised by a crisis of the soul. One of the symptoms of that crisis is a disintegration which is not confined to this country but is practically world-wide. The events that have been taking place and the attitude of people towards them in the Congo, in the Middle-East and the Far-East and many other places bear testimony to the existence of that disintegration.

One of the symptoms of this disintegration is a loss of equilibrium, a loss of what the 'Bhagavat Gita' wisely terms 'Samata', and the most distressing aspect of this disequilibrium and loss of 'samata' is what I venture to call the loss of personality, complete or partial.

I am reminded of a great saying by the American philosopher Emerson, who said "Most people are other people; their talks are some one else's opinion, their lives are a mimicry and even their fashions are a quotation."

Now, it is perfectly true that today on account of the modern methods of propaganda and of accelerated mass communication, this dragooning of men's mind, and this regimentation of men's soul are taking place at a great rate.

Our country calls itself a secular state. Nevertheless, the elections of today, the ministerial crises of today and the many other events that are projecting themselves before us are intrinsically based on caste or community.

Furthermore, the old and obsolete weapons of civil disobedience, fasts unto death, picketing and what is mis-called **satyagraha** are now brandished or used for irrelevant purposes and in a manner not contemplated by their creators.

Group or individual violence of thought or action is often the result of crowd mentality arising from a loss of older, moral and spiritual values.

People dare not act for themselves or think for themselves but follow others and what is much more, to be deplored, follow outworn slogans and dogmas, which now have lost their validity and are outworn. So, it is that nobody acts for or by himself. One becomes a divided and disintegrated individual. The result we see all around

in the form of regional, linguistic, communal and other group rivalries and conflicts.

If this be granted, what should be the manner of approach to this phenomenon that we see around us? There is nothing more important to an individual or a country than to realise that there should be unity only in necessary things, liberty in most other things but charity in all things.

Now one of the baneful effects of this mass mentality, this crowd psychology, this dragooned way of thinking and acting, is the annihilation of many human values. People insist on and crave for unity in unessential things. They crave for uniformity rather than for unity. In other words, opposition or difference of opinion is regarded as something which have to be deprecated at all costs. This attitude follows from the mass psychology and mass propaganda which America and other countries have pushed to logical or illogical conclusions but which also are finding their way in our country.

The remedy for this state of things is the complete remodelling of the system of education. It is an incontrovertible fact that some people are ready now-a-days to talk on any subject, even if they are completely unequipped to deal with it. The topic of education is one of their frequent obsessions. The education that I refer to is not the mere primary, secondary, university or technical education but the education of the citizen from childhood up to the adult stage in human values and such an education can be imported into this country only as a result and not otherwise of a spiritual and psychological revival.

Such a revival needs very careful preparation because at this moment it is not so important really to tinker partially at the ordinary means and process of education as to make those processes spiritually comprehensive and even creative in a secular state.

We must think of utilising the tremendous instrument of propaganda which is now, owing to the march of science available to us. We must use that propaganda machinery for inculcating the fundamental human values of courage, of loyalty, of truth and tolerance. That seems to

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CRISIS OF CHARACTER

By Shri P. G. Shah

The present crisis in character that has taken place in India is observable throughout the world. It has also not taken place for the first time in the history of humanity for a Historian like Toynbee has shown that civilisations rise and fall and that generally when a fall begins to take place it cannot be easily prevented.

We notice a certain amount of anti-social behaviour throughout the world. It has not yet recovered successfully from the effect of two world wars of a sanguinary type; and we are now immersed in a cold war which is more disastrous to our morals and to the retention of our normal human characters. There are certain features which are noteworthy probably throughout the world.

There is daily disquiet, disharmony and discontent everywhere. There is dissatisfaction between the rulers and the ruled; between capitalist and labour; between the landlord and tenant, between the customer and shopkeeper; between the teacher and the taught; between the sexes; between parents and children within the family. The anti-social behaviour of the people on the one side and the increasing favour shown to totalitarian governments on the other side; the increasing expenditure on defence services and on armaments; in spite of the loud talks of democracy there is an increasing frequency of military dictatorship as the only solution or growing disharmony. There is an increasing rocket of high prices and insufficient production. The fever of strikes brought trade unions is getting more and more frequent even though science has controlled other epidemics and diseases. Our usually buoyant philosopher Vice-President, Dr. Radhakrishnan, has stated "We are basically dishonest, corrupt and degenerate". "Widespread evasion of taxes, graft, inadequate consideration for others, an almost total absence of civic conscience, the obsession with examinations and the malpractices by which to evade them, the sordid politics in the Universities, frequent ticketless travelling—all these prove that we are no longer normal mentally healthy persons." The expanding money economy and increasing respect paid to money and luxury in contrast to plain living and high thinking is another sign of the crisis that is before us.

In a short space, I cannot make a complete diagnosis of the causes of these conditions; but I cannot help thinking that the inflated paper money is probably one of the important factors of the high value placed on money. The simple fact that in spite of all the financial controls the amount of notes in circulation is now 1,800 crores of Rupees though the quantity of goods in circulation is comparatively restricted owing to insufficient expansion and the growing export of goods produced under the two five year plans. Our railways have proved inadequate for securing free movements of the traffic in goods and in human beings, which are increasing out of proportion to the supply in every sphere. Food supply is much less than the demand and we have to import large quantities. Our population is growing at a rate much beyond our capacity to supply them with food, clothing and housing at prices within the national or individual income. The middle classes in the city and the landless labourer in the villages feel the strain the heaviest.

Besides these physical and economic factors there is the difficulty caused by mental disharmony and disquiet and spiritual unrest. It can only be remedied by an internal adjustment. Modern science lays great stress on the psychology of behaviour and on psychological adjustment of human conflict in every walk of life. This psychological adjustment of sex life, or family life, political life and industrial warfare is a fundamental necessity; we need in modern life an increasing use of family adjustment, family consulting, child guidance, vocational guidance, industrial relations, moral re-armament, appreciation of religious and spiritual values, and in brief an acceptance of higher values than those dictated by a selfish money economy.

I must here attach a note of warning. The experience of my suggestions for remedy for this crisis is in the direction of a holistic scientific approach not merely the outlook of physical sciences. By science I do not mean only the physical sciences that deal with fission of the atom or flight to the moon; but science which deals with human being as a whole including the social and mental sciences and the science of human behaviour and the science of study of religious and spiritual phenomena.

most modern sciences like psychology and anthropology have thrown new light on our daily behaviours so that no scientific planning for the progress of humanity can ignore these social sciences. Politicians and planners, industrialists and bankers may plan for the future with astronomical figures of calculations for expanding foreign markets and controlling exchange and currency but as long as they ignore the human, mental and spiritual factors they will fail to prevent the crisis of character.

It is the moral, ethical and spiritual aspects of our daily behaviour which is going to be the only solace of our distracted humanity. Unless man learns real appreciation of the central conception of the soul—call it the "Atma" or "Parmatma" there is no future for humanity. The achievements of Indian Yoga Shastra, especially by Patanjali has drawn the attention of modern western psychologists like Jung. Inner concentration and inwardness of feeling and life, and of daily behaviour is the only way of real social progress. The great vagaries of modern political life of elections and of party politics have taken us away from the true inwardness and increased the dangers of the present day crisis. Social and moral goodness cannot be achieved without a spiritual background and so also individual and social efficiency cannot be secured without a proper appreciation of the higher spiritual values. Religion is a most potent weapon for the realisation of the inner self but in certain religious systems, the outward form and ceremonials absorb such an amount of effort and endeavour that often little scope is left for real spiritual progress. But what I want to place before you in the simple idea that the modern crisis in character cannot be controlled without the help of psychological forces on the physical plane and without moral and spiritual forces on the inner control of life. At a time when the world is crossing over to a new phase and when our mother country is passing through the crisis of transition from a backward country to a modern state, let us not forget the great spiritual and moral forces that enlighten our inner life and that are essential in our natural progress. We have all to learn to place our country above all and the self-interest of our race to follow the ideals of

the Father of the Nation to achieve a casteless society without exploitation in the modern age.

DISINTEGRATION: HOW TO AVERT IT

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me as a task which needs missionaries and which needs great initiative. Every one has to harness himself to that task.

To my mind there is also an accompaniment of the cultural disintegration another phenomenon viz., economic disintegration. Not long ago I was reading a book, entitled "Inflation and Society" by Graham Hutton. I quote a paragraph from that book which seems to have a particular applicability to many things happening in our own country and in our own time "In the establishment of an omnipotent and omniscient state authority in the modern world, there is more danger to personal freedom and to personal initiative than in any period that has gone before. Man's supremacy over the blind forces of technical achievement which appeared unimaginable a little lifetime or more ago is now a **fait accompli** and such supremacy enables the rulers of today aptly and easily to exercise centralised state authority to the further extreme local bureaucracy. The individual man and woman as a producer as a consumer, as a citizen is reduced to a non-entity by reason of the new regulations of centralised authority and the consequent minimising of the sacredness of human personality."

In Mr. Hutton's view, practically all the ills of the modern world are due to inflation and he considers that the mounting spiral of prices and wages unaccompanied by any increase in productivity and conducted without reference to that productivity is the main cause, whether in England, in the United States or in Russia, of the present imbalance in many directions. In other words, the progress of planning should be a function of productivity, wage rise and wage increase should depend on productivity and a false idea of prosperity should not be fostered by the printing of new notes and making money cheaper at a terrible future cost.

(Courtesy: 'Bhavan's Journal')

The Future Of University Education

By Kingsley Amls

We hear a good deal these days about "the future of education." It should not be assumed that this entails an exceptionally sensitive concern for what is important in education. An excessive concern with "getting things done," a frantic beating about for impressive-sounding proposals, may on the contrary be symptomatic of a loss in grasp of the central realities, a radical lack of faith in education.

Educational administrators tend to be the most susceptible to this sickness. But, we repeat, a great deal of talk about something need not be a sign of real concern and respect for it.

Sorel said that a parliamentary Socialist has more in common with other politicians than he has with other working-class Socialists. Analogously, we may say that an academic administrator has more in common with other administrators than he has with those actively engaged in academic work. This point has to be emphasized, since people may think that no one is likely to understand education better than a professor of education.

Teaching Shops

But, tragically enough, university departments of education are less concerned with inquiry into the nature and conditions of education in a disciplined academic manner than with meeting certain practical requirements—such as providing 'qualified' teachers in sufficient numbers to satisfy the Ministry of Education, a largely administrative problem. No one contests the need for able teachers; but this is not to admit that the best way of preparing someone for teaching is by "training" him in "techniques." What is more important is that a prospective teacher should have a genuine feeling for the importance of his subject and ability in it. If he doesn't have these, no "techniques" are going to enable him to convey them to his pupils.

The present writers are ordinary members of the academic staff at an ordinary provincial university, engaged in teaching and thinking about problems arising in our respective subjects. It so happens that some of us belong to the Faculty of Arts. But we certainly do not intend what we may as any sort of "defence" of the arts against science. Indeed the honest pursuit of scientific investigation in the universi-

ties is just as much threatened by contemporary ways of thinking about education as is such work in the arts.

What is more, the pursuit of science in a society cannot be independent of the pursuit of the arts. Science and the arts are not "two cultures," even though Sir Charles Snow has said they are and nearly everyone has believed him. They are aspects of a single culture and, as Robert Oppenheimer has shown in his lecture on "Tradition and Discovery" the sickness of our time is not that we have two cultures that are growing apart from each other; but that the one culture we have is disintegrating—to the detriment of humanities and sciences alike.

Ideas, scientific or otherwise, can be born and recognized as important only where men talk a common language in which such ideas can be discussed and evaluated. And a sufficiently developed common language presupposes a common literature that the speakers of the language care about. When this care declines, so do the possibilities of communication and the sense of the importance of intellectual inquiry, including scientific inquiry. That this sense has declined is confirmed, not refuted, by strident rhetoric about the importance of science for the sake of its practical ends.

Biggest Menace

The greatest current threat to education is that of practicality. This explains why it should be so widely misconceived as a clash between the demands of science and the demands of the humanities. Scientific discoveries are often useful for practical ends. Seeing this, it is easy to slip into thinking that the importance of scientific investigation lies in such usefulness. The next step is to channel investigation into directions which seem to promise the maximum of utility. When this happens perspectives within science become distorted and its character changes—and not necessarily into something which in the long run, will serve even practical ends so well; though that is by no means the deepest tragedy of such a transaction.

Some educationists, particularly Mr. Peterson, advocate a practicalist attitude to education in general. He tells us that "For those whose university years are spent

the prelude to an academic life, a wider, more general and more relevant course will be more useful. . . ." When we see what he means by "relevance," it becomes clear that this is a tautology. By "relevance" he means "usefulness." He speaks of "potential relevance to a career in the twentieth century," "relevance to life outside the academic world," and attributes the alleged "malaise" of arts undergraduates to a realization that "their knowledge, unlike that of the scientist, has no direct reference to any possible job—except that of teaching it to the next generation."

Please notice a revealing opposition between "the academic world" and "life outside." There could hardly be a clearer expression of lack of faith in academic ways of living and thinking as important ingredients of civilized life. One is reminded of Plato's sinister utilitarian, Calicles: "Philosophy (read: any sort of academic inquiry) is a pretty thing, if you engage in it moderately in youth: but if you continue it longer than you should, it is the ruin of any man. For if a man is exceptionally gifted and yet pursues philosophy far on in life, he must prove entirely unacquainted with all the accomplishments requisite for a gentleman and a man of distinction." Of course, academics must expect incomprehension and opposition; it is largely in their struggle against these that inquiry progresses. But it is sad to find these attitudes in the director of a university department of education.

Ivory Tower

The widespread idea that the academic world is somehow an "ivory tower," apart from real living, needs further attention, as it lies at the heart of the way of thinking under examination here. Participation in business, industry or government is apparently "life" in a sense in which academic pursuits are not. But to say that the attitudes and interests of the academic are likely to be remote from those, say, of the business man is the same as saying that the attitudes and interests of the business man are likely to be remote from those of the academic. So why not say it is the business man who is in the "ivory tower" and the academic who is "living"?

An essential feature of disinterested inquiry is the criticism of commonly unexamined assumptions. Now if inquiry,

tially for something "outside," an area is closed to criticism and the area most in need of it. We mean assumptions about what is involved in living, what should count as success and failure in life. It is precisely this sort of investigation that is central to such arts studies as literature, history and philosophy. Mr. Peterson's view assumes we all understand what is involved in "living" and that the business of education is simply to prepare us for it and fit us to be "successful" in it. The important thing is held to be the holding of jobs, and education is debased into the training of prospective job-holders. It ceases to be the development of powers of criticism—including criticism of forces hostile to the questioning of such assumptions.

Education is not for living. It is an initiation into inquiry, which is a form of living itself and includes other forms of living among its objects. So far removed is the pursuit of inquiry from being the habitation of an ivory tower.

University Work

Knowledge is not an inert substance, but a live way of thinking which dies if it is regarded just as something to be handed on. Then there will be nothing to hand on. As Mr. John Holloway recently remarked, a civilized man's understanding of his own past, of the history, literature and culture from which he springs and which gives his life its sense, is what distinguishes him from a savage.

We are certainly far from maintaining that all is now for the best in the best of all possible university systems. The point is that changes should consist in improving standards of learning, not in prostituting them to the demands of business, the prison commissioners, or local education authorities.

The universities must "capture the interest and enthusiasm of their non-scientific students": "the young are genuinely interested" in subjects like criminology and industrial relations, as opposed to such dry-as-dust relics as literature and philology. Observe the logic of Mr. Peterson's argument. First, we need an efficient "pump" (the image is his) to transfer individuals from the "pool of ability" into the universities—and presumably out again, suitably processed—because it is important that more and more should

Man's Path To Outer Space

By Academician Norair M. Sissakian

A manned flight into outer space is an event of historic importance, a great victory for the creative genius of man, a tremendous achievement on the part of Soviet science and engineering—it is the “astral hour of man” that Stefan Zweig wrote about. That “hour”, however, was preceded by years of searching, by the persistent work of specialists in many branches of science, of engineers, designers, and research workers.

Powerful rocket engines and sensitive measuring instruments have been designed, and techniques for control and steering during flight and on landing have been developed.

The biological and medical sciences had to solve very important problems connected with safety during manned space flight. In the incredibly short time that has elapsed since the launching of the first Sputnik in 1957, an extensive programme of research has been carried out on the reactions of animals during flights in rockets and space-ships. Only when these problems had been solved could the first manned flight into space be permitted.

The unusual factors against which man must be protected in space are now widely known.

Pressure, Radiation, etc.

The first group concerns actual physical conditions in space. These include extremely low barometric pressure; the absence of molecular oxygen; the effect of cosmic, ultra-violet and corpuscular radiation; and the danger of meteors. Of all these, the most important is the radiation danger.

Soviet biologists and engineers have developed a hermetically-sealed cabin in which the barometric pressure is kept at a definite level and the gas composition of the air is that required for the normal respiration of animals and man.

The behaviour of the animals and their various physiological functions were registered at all stages of the flight, from the start to the landing of the cabin capsule.

Methods used in ordinary laboratory practice proved unsuitable for this purpose. Scientists, therefore, had to design special instruments which would function reliably

and automatically under flight conditions to record cardiac activity, respiration, blood pressure and the general behaviour of the animals under conditions of acceleration, jolting and vibration; while cinecameras provided visual evidence.

As far as radiation is concerned, research preceding the manned flight studied the quantitative aspect and physical characteristics of the radiation, its immediate effect on the animals and its genetic consequences. This research showed precisely what protective measures were necessary to ensure the complete safety of man in an orbit between three hundred and four hundred kilometres (190 and 250 miles) above the earth.

Noise, Vibration, Acceleration

The next group of factors covers conditions due directly to flight in a space vehicle. These include: noise, vibration, acceleration when the engines are functioning to put the vehicle in orbit; and weightlessness during flight in orbit.

As regards noise, it is possible to reduce its level by careful sound insulation of the cabin. Noise accompanies the “active” section of the flight, during which the vehicle is accelerated, and continues only until it is in orbit. In orbital flight, when the rocket engines are no longer working, silence is disturbed only by the low noises of the instruments ticking away in the cabin. In short, noise does not seriously interfere with man's flight in space.

The effect of vibration, which also occurs only during the “active” part of the flight, has been well studied. And a number of absorbers designed to reduce its effect on the human organism have proved very effective and reliable.

Considerable data has also been gathered on the way in which acceleration affects the body. The human organism is not affected by velocity, no matter how great it may be. This is proved by one fact alone: we do not feel the speed at which the earth revolves around the sun—100,000 kilometres (62,000 miles) an hour. However, a change of speed or a change in the direction of motion is felt very sharply: acceleration is perceived as increased gravity and it affects the circula-

tion of the blood, respiration and other functions of the organism.

It has been established that the organism can best withstand overloading when the stress is perpendicular to the vertical axis of the body—from chest to back, back to chest, right to left, or left to right. This means that the pilot must be in a semi-prone position inside the spaceship, especially when the ship is on the trajectory that puts it into orbit and when it re-enters the dense layers of the atmosphere on its return to earth. In this position a man can stand up to very considerable overloading for a lengthy period.

Weightlessness

After the period of acceleration, that is, when the spaceship is already in orbit, the pilot experiences a state of weightlessness. This is due to the fact that the gravitational pull of earth is balanced as it were by centrifugal forces. The body loses its weight and objects float about in the cabin. The pilot remains in this state throughout his flight in orbit.

In this connection, scientists are very interested in a number of questions: how will the exclusion of signals from an extensive zone of receptor nerves whose functioning is connected with earth's gravitational field affect man's nervous system; what possibilities are there of the human organism adapting itself to conditions of weightlessness, how long does a man retain his ability to work during a space flight, and how does the gravitation factor influence the functioning of the cardio-vascular system?

The majority of researchers believe that the human organism is well able to adapt itself to weightlessness, and that this great adaptability will compensate for the absence of vestibular and, partially, of deep muscular-articular sensibility. An important role in this compensation will be played by the visual analyser that is capable of introducing the necessary corrections to man's behaviour and actions, by "informing" him of the position of his body in space and of the muscular tension necessary to perform specific actions.

All these assumptions, however, stand in need of strict scientific verification, verification which has already begun with the historic flight of the world's first space pilot, Yuri Gagarin.

Tricky Transitions

Considerable interest attaches to the study of the way the organism reacts to transition from overloading to weightlessness and, contrariwise, from weightlessness to overloading. The first transition takes place when the rocket engines are cut off after the velocity necessary to keep the spaceship in orbit has been attained; the second, when the retro-engine is switched on to reduce the speed and bring the vehicle out of orbit for its return to earth.

We are now able to say that the human organism stands up to the transition from overloading to weightlessness better than it does to the reverse transition.

Lastly, it is very important to bear in mind other factors caused by the pilot being enclosed in the hermetically-sealed cabin of the spaceship.

During a lengthy flight in space the pilot is deprived of the vast majority of the excitors to which he is accustomed: aural—there is absolute silence in outer space; visual—the blackness of the cosmic environment, studded with stars, does not give the impression of depth, etc.

The "isolation" of the space pilot undoubtedly raises great difficulties of a psychological nature, further study of this problem is essential and rational methods of reducing it must be developed.

The combination of these factors—state of weightlessness, sharp reduction of customary excitors, disruption of the normal life rhythm (e.g., the change of day and night, work and repose), and isolation of the pilot may lead to certain psychic and vegetative disorders if necessary prophylactic measures are not evolved. Physical training and the training of will-power are therefore, important items in the space pilot's preparation for flight.

Return to Earth

The safety of man's return to earth is the most important of all factors, the one that makes a manned flight possible. In this connection, extensive research with rockets carrying animals has been carried out over a lengthy period in the Soviet Union; a series of noteworthy experiments has also been made to test the "aimed" landing of spaceships. It was proved that the safe return to earth of a hermetically sealed cabin with its inhabitants was quite

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HOW TO SUCCEED IN YOUR CAREER

By Marjorie Boulton, M.A.

Anyone who wishes to succeed in his or her career can generally do so by merit—brains, hard work, loyalty and persistence.

It is true that even in the best of worlds, people may occasionally be the victims of bad luck. But it is much more certainly and generally true that most unsuccessful people are their own victims.

How then can success be achieved?

Usually it is achieved by a mixture of effort and tactics. A serious plan to succeed must include both. The following ten points offer the main lines of approach.

1 Learn your job: Some time ago, when preparing a special menu I asked in a grocer's shop, "Have you any Italian cheeses?" "Oh, no," said the assistant in a vague and unhelpful tone, without turning round to the cheese counter. When she moved away, I saw that she had been standing with her back to a cheese conspicuously marked "Made in Italy."

Had I been that girl's employer, my impression of her grip on her job would not have been favourable.

As soon as you enter a new job, it is worthwhile to learn everything possible about it. What is the daily routine? How do things work? What is the quickest method of doing something? What is the purpose of this routine?

A simple job requires little knowledge, a complicated one, much more, but every job is done better by the person who has mastered it.

A person who intends to make a real career should never stop studying. We leave school, we leave college, our evening classes come to an end, but we can always go on learning. We should keep up-to-date with new developments in our subject, by reading new books and specialist magazines.

In some jobs, such as teaching or gardening or cooking, it is worth while to try experiments with new methods, substances or equipment.

My mother was in hospital some time ago, and was nursed by a Nigerian girl who was eager to learn. "I like washing you," the nurse said, "your stitches are very interesting." She was trying to learn more about medicine and surgery as she did her

routine tasks. Someone said to my mother, "That girl is a future hospital matron in her own country!"

We should never be too proud to learn. I teach students, but my students frequently teach me something useful. We should have our eyes open for useful knowledge, we should not be ashamed of asking questions when we do not know. We should not grudge money spent on knowledge, it is better to give up some luxury than to do without a class, a book or a magazine subscription that will give us valuable knowledge, for "the man who empties his purse into his head has something of which he can never be robbed."

The person who is obviously trying to learn also makes a good impression on an intelligent employer. This in itself is useful.

2 Do your job: The medieval teaching, based on a bad interpretation of the Bible, that work is a curse, is a very dangerous doctrine. Work, unless it is hopelessly ungenial, is satisfying and is a duty.

Do we expect the world to give us a living without effort? Why should we be different from all the other human creatures and most of the animals?

Those who resent having to work for a living very seldom succeed in a career. They are often left in the end doing the dullest and worst paid jobs, with a more sensible and courageous attitude they might have found pleasanter and better paid work.

The person who is late for work, who prolongs the tea break or the lunch interval, who does his or her own work in an employer's time when there is a task to be done for the employer, who scamps jobs and is satisfied with the second best, is really being both dishonest and inefficient.

There is nothing clever in getting away with it. These practices are observed by people in authority more often than we suppose, and by them we show an employer that we are not to be trusted.

The clock-watcher is not dishonest, like the first person. He is merely unwilling to do a stroke of work more than is obligatory. Such a person may well, until five o'clock, be a good worker; but at five he loses all interest in the job.

The person who is willing sometimes to stay behind to finish something or to help others is again, the person who is observed and noted as helpful and hard-working. His obliging and co-operative attitude is a part of the science of success.

3 Then do a little more: It follows from the advice not to watch the clock that generous attitudes help towards success. An endless talking and thinking about "my rights" is not a magnanimous or a very adult attitude, though, of course, situations do sometimes arise in which an employee has to stand up for "rights" and so for "right."

However, the person who is willing to stay late to finish, to take work home, to lend a hand where help is needed, and so on, is on the road to success.

"What are you such a muggins for?" says a fellow-worker. "You won't catch me being put upon like that!" But somehow muggins is the one who gets the promotion.

It is possible to look out, deliberately, for little extra services we can do. This makes us popular, often, with colleagues as well as with employers.

If, for instance, I saw a workman give a little of his own time to level a bump in the floor on which several people had tripped, or fasten down a piece of loose linoleum, or tidy away some litter, I should at once feel, "Here is a sensible, helpful fellow."

People who, instead of grumbling about things that are amiss, do something sensible to set them right, help everybody and make an excellent impression.

4. Show the capacity to take responsibility: The employer who is intending to promote someone is nearly always wanting someone who can take at least some responsibility.

It is not always easy for a junior to prove that he or she can take responsibility, especially in those unhappy places of work where a junior is very much made to feel subordinate. But the chance does generally come and should be taken.

To be given a bigger and harder task is not a misfortune. It is a test, and may well be intended as such.

5. Be tactful and polite: Courtesy and pleasant ways are not indications that one

is soft, timid or a snob. The biggest snobs are rude, disdainful people.

We should try to be polite and kind to everyone in our job: employer, fellow-workers, visitors, and subordinates. Shouting, bad language, sarcastic remarks, excessive criticism, nagging, whining, aggressiveness, are sure to make us unpopular, and unfit us for a responsible position.

Obviously, in the haste of a rush job or in the din of a factory, the manners that are suitable for an aristocratic drawing-room are too leisurely to suit the situation. But we can all try to cultivate that essential courtesy which may be defined simply as **considering the convenience and feelings of others.**

This may be shown just as well by spreading a clean newspaper on a dusty bench where someone intends to sit, as by putting a silken cushion behind some elderly titled lady dripping with pearls.

Helping to carry things, opening doors for people, passing things that are needed, warning people of some hazard such as split oil, asking permission to do things, saying "Thank you," are the kind of small courtesies that are worth while almost everywhere.

It is also worth while to try to smile at people and to speak kindly.

If we have to make a complaint, rebuke someone, contradict someone and so on, it is always a wise plan to give a little time to thinking how we can best do this without arousing needless resentment. A tactful way of saying things often saves a quarrel.

6. Don't be a grouser: Most of us need to grumble sometimes—or burst! But the habit of grumbling is a very unhealthy habit, as well as a hindrance in our career.

Nobody wants to give responsibility to a person who is everlastingly moaning about something, or to entrust the training of others to such a person. No employer will want to promote a grouser to work where the employer will have to hear grouses all day.

A person of strong character knows when to make a complaint. He or she then makes it; to the right person; at the right time; and in a sensible, reasonable manner. This may be a manly action and may do much good.

Everlasting whining is another thing; and looking for something to grumble about is a morbid attitude.

The person who at least tries to be bold and cheerful and optimistic about the job, looks better, works better and is very much easier to get on with than the grouser.

7. Set out to please your employer: It is not always easy to draw the dividing line in exactly the right place between sycophantic flattery and sensible helpfulness to one's employer.

Perhaps the guiding principle may be: set out to please your employer in all the ways that you are sure are honourable and that do not go against your conscience.

Insincere flattery is usually detected and disliked. Genuine helpfulness is usually appreciated. It is possible to be very kind and polite indeed without being in the least slavish.

It is generally a good idea to try, unobtrusively, to find out a little about the interests and tastes of one's employer. There may be a common interest; if so, let it be known—but casually, as if by accident.

As little a thing as a newspaper cutting on a subject that interests him shows kindness and may be remembered. Pets and children often offer an opportunity to be of service. An offer to find something out, to make something or to mend something, should be sincere—but it may also make an excellent impression.

Small services that cost very little trouble may keep a person in his employer's eye and gradually build up a very favourable opinion. This is not wasted even if the person leaves that job without promotion; he will receive a better reference or testimonial.

Sycophancy and flattery are bad, dishonest things. But the kindness and obligingness which are really part of being human and sympathetic are both good in themselves. They are also aids to promotion.

8. Use spare time wisely: The person who is always thinking about work makes a great mistake. If we are to work well, we do better not to allow an ambition to become an obsession.

Amusement, exercise, social life, hobbies, keep us fresh and vigorous, cheerful and friendly. Social life keeps our man-

ners polished; hobbies give us a healthy sense of achievement.

The person who lives only for a job is apt to become an insipid, dull person, with no conversation and little sociability.

For a post of responsibility, one must usually be fairly good at getting on with people; and an interesting life gives us material for interesting conversation.

Our spare time should therefore be partly a time for refreshing our minds and bodies with new activities. It is also a time for rest; sleep and rest are essential for good work. Yet it is also a time for learning more about our work; the ambitious person almost always finds that some spare time study is advisable.

I would rather waste money than time. I can earn some more money, but I can never replace a wasted evening. Time is wasted if we are not either working, playing, resting or enjoying some sort of human relationship.

It is aimless pottering that prevents people from studying or sleeping.

9. Take care of health: Health is almost as vital an asset to the ambitious person as intelligence.

This does not mean that some people have not achieved amazing successes in spite of serious handicaps and ill-health; I have known many of these. But there is no sense in making life harder than it has to be; to neglect our health for the sake of our ambition is a short-sighted policy.

A worker who frequently has to take time off for health reasons is not likely to be promoted.

It is worth while to consult a doctor and, if necessary, a specialist, about some ailment that persists. Most diseases can be cured if treated soon enough; and many other can be rendered almost harmless by some change in our diet or mode of life.

The ambitious person should try to obey the ordinary laws of health such as: adequate and not excessive food; proper sleep; cleanliness; bowel regularity; ventilation; good posture and so on.

10. Seize the opportunity: One day the golden opportunity comes. The right job falls vacant; the time is ripe to ask for an increase of salary; a volunteer is wanted to do a difficult task; your special knowledge is needed.

This is the moment. Take the opportunity!

It may mean an upheaval; it may bring extra work; its demands may seem frightening; but if it is really success and promotion that we want, we must not be afraid.

Opportunity often comes disguised as a difficulty; it almost always comes as a challenge. The better job is not the soft job, even if it is cleaner or involves less manual work. It almost invariably demands more intelligence, more concentration and more initiative than the junior or unskilled job.

One point does arise here. It is not a duty to be ambitious. Some people are ambitious and gain great satisfaction from succeeding in a career. Other people are genuinely not ambitious; responsibility makes them unhappy, they are satisfied with what they are doing and they have enough money for their needs.

There is no reason why such a person should force himself to be ambitious. Not everyone can be at the top, and some are far happier in a job that does not demand much of them.

Wisdom is to know what we want and to seek it by the right means, not to wear ourselves out in the pursuit of something we do not really want.

The person who really wants to succeed in a career, to have an important job and to be at the top of the tree, should remember the African proverb: "Follow bees, if you want to eat honey."

He or she should do everything possible to prepare for an opportunity, and when the opportunity appears seize it firmly.

No one ever reached the top of a tree by sawing off the branch on which he was sitting. The way to the top is by climbing, with all our skill, strength and persistence.

(Courtesy: 'The Psychologist Magazine')

The successful man doesn't wait for the new year to make his resolutions, doesn't wait for a propitious moment to start a much needed action. The starting is done at the moment the idea comes into his head. "Do it now" is more than an injunction. It is a principle of success.

—J.C. Roberts

COLOMBO PLAN

The Colombo Plan (for Co-operative Economic Development in South and South-East Asia) was conceived at a meeting of the Foreign Ministers of the Commonwealth held in Colombo in January 1950. India was represented at the meeting by Shri Nehru.

Countries of the Commonwealth—Australia, Canada, Ceylon, India, New Zealand, Pakistan, the United Kingdom, Malaya and North Borneo—were the original members.

Over the years, the membership of the Colombo Plan has grown to 22—16 countries within South and South-East Asia and six countries outside it.

The 16 countries within the area are Burma, Cambodia, Ceylon, the Federation of Malaya, India, Indonesia, Laos, Nepal, Pakistan, the Philippines, Singapore, Thailand and Viet-Nam and Brunei. North Borneo and Sarawak which take part in the Plan through their association with the United Kingdom.

The six countries outside the area are Australia, Canada, Japan, New Zealand, the United Kingdom and the United States.

The Plan, which is based on the principle of mutual cooperation, provides for practical assistance in two main forms—capital aid and technical co-operation.

Assistance is negotiated on a bilateral basis between the Governments concerned without the intervention of any central organisation or secretariat.

Nearly 20 per cent of all the training places provided under the Colombo Plan are now within the region.

Of the countries of the region, India has provided the largest number of training places—1,279 out of 1,566—during the ten year period. India also provided 34 experts—the highest for a regional member.

The number of training places received by Indians in the ten-year period is the highest for any country—3,275.

The Consultative Committee of the Colombo Plan meets once every year to review the progress of the Plan.

At the meeting of the Consultative Committee in Jakarta (Indonesia) in November, 1959, it was decided that the Colombo Plan should be continued until June 1966.

Rabindranath Tagore

By Bhabani Bhattacharya

More than any other man of our century, Rabindranath Tagore, poet of Bengal, has incarnated the spirit of the European Renaissance—that spirit which called for a flowering of the individual personality, the full development of all the many facets of human genius. This Tagore combined with extraordinary moral strength and spiritual power, with an internationalism that embraced all mankind and a universalism that encompassed all of creation.

"Thou hast made me endless," he wrote, "such is thy pleasure. This frail vessel of my life Thou emptiest and fillest again and again." Such was Tagore's testament of faith, his grateful homage to **Jiban-devata**, Life Force, personified and vividly realized in some of his most sensitive poems. And these were not empty words. Through phase after phase of creativity, over a vast panorama of beginnings and of ends that were signposts of new beginnings, Tagore let his genius express itself unfalteringly up to his death in the eightieth year of his life.

Barely a tiny fraction of his immense literary output has been rendered into foreign languages. That is understandable. No poet loses more in translation than Tagore. His poems are sheer music. Their emotional intensity, the rhapsody they convey fade under the touch of a translator's hand, however deft. This applies also to most of his prose work: for, prose from Tagore's pen combines deep thought with copious decorative effects, and is not so very different from poetry itself.

His poetical works including plays in verse make well over a hundred volumes. The songs he wrote number more than a thousand—he himself set a great many of them to music—and they have become a part of Bengal's cultural life. Indeed it would be hard to find an educated man or woman in Bengal who does not know some of Tagore's songs. One of them, **Jana Gana Mana**, is India's national anthem. Seldom does a day pass without a Tagore song featuring in a broadcast from some station of All-India Radio.

His dance-dramas, into which the qualities of folk-plays have been deeply absorbed, are staged everywhere in India.

There was a time when the poet himself used to appear on the stage, and in this medium too he showed unusual talent. The celebrations that were planned in India to mark the centenary of his birth on 6 May, 1861, included the staging of these dance-dramas in scores of theatres.

Though, above all, a poet, Tagore wrote excellent fiction. Several of his short stories, built around human values, rank among the world's classics in this genre. His novels may not be of equal significance, but they are landmarks in the evolution of Bengali prose; they are remarkable by their vivid portrayal, depth of realism and a profound understanding of Indian life. **Gora**, **Sesher Kabita** (Farewell My Friend), and **Yogayog** (Union and Separation), are poles apart from one another in form as well as content. **Gora** is a powerful appeal for brotherhood and tolerance. **Sesher Kabita**, one of the world's great love stories, is vibrant with passion. **Yogayog** is a fine, detailed study of character.

When Tagore was nearly seventy he took to painting, almost casually, and excelled again. His style of brushwork was entirely his own. It was the idea alone that made the picture, with improvised lines and colour. Exhibited in Paris and elsewhere, Tagore's paintings won warm praise from the leading critics of the day.

Of great importance too are his numerous essays on literary, social, educational and political themes. These essays reveal the poet's twofold roots. He belongs alike to the East and the West. He seeks a synthesis between Indian traditional values and the materialist concepts that come surging from abroad and make decisive impact. He is sharply opposed to nationalism in the narrow sense of the word, though he is a patriot to the core of his heart. India, he repeatedly points out, has always been the meeting ground of diverse cultures. On Indian soil, age after age, those cultures blended and achieved the true kind of unity. That process, he believes, must continue today. The genius of India has been manifested in the practical application of the principle of unity in diversity. Here is a lesson for all mankind. Universality implies the retention and creative fusion even of contradictory elements.

The internationalism in Tagore struck a bold and strident note in the days when chauvinism was the fashion almost everywhere in the world. In that sense he was very much in advance of his time. The French writer Romain Rolland has stated that Tagore "contributed more than anyone towards the union of the two hemispheres of the spirit."

Strangely, the poet was also a man of action. Among the various fields in which he worked was education. His essays reveal him as one of the world's great educational thinkers; but it was not enough for him to set down his ideas on paper; he had to translate them into hard reality. In 1900, when he was not so well-known—the Nobel Prize was still 13 years ahead—he established his school, Santiniketan, almost single-handed. He taught at the school which began with four students and he did most of the work connected with it until help came. Later, sadly aware of India's economic ills, he took up the task of village reconstruction. He was among the first in India to see the value of the Co-operative system. The pioneer work he did at his rural institution, Sriniketan, has inspired India today to launch a full-scale programme of reconstruction and development in thousands of villages.

The culminating point where Tagore's educational ideas blended with his world outlook was Visva-Bharati, the international university he founded in 1921. It has drawn as visiting professors some of Europe's foremost scholars. And while the West came to Visva-Bharati, Tagore went several times to Europe and America; seldom has a literary figure received such a spectacular ovation. He met the great thinkers of the West, lectured at the Universities of Oxford and Harvard, and with him everywhere went something of the spirit of India. He was, as it were, his country's cultural Ambassador. Blessed with complete freedom of mind he had as much to give as to receive.

"All humanity's greatest is mine". Tagore wrote. "The infinite personality of man can only come from the magnificent harmony of all human races. My prayer is that India may represent the co-operation of all the peoples of the earth."

As Jawaharlal Nehru wrote a few days after Tagore's death in August, 1941: "Both Gurudev (Tagore) and Gandhiji took

much from the West and from other countries, especially Gurudev. Neither was narrowly national. Their message was for the world." (UNESCO)

THE FUTURE OF UNIVERSITY EDUCATION

(Continued from page 597)

have a university education. But once inside, they turn out not to be genuinely interested in what goes on there and therefore not capable of profiting from it. So in order to enable more to participate in something you think valuable, you denature the thing, because those enabled don't see its value.

We argue not that new studies should never be introduced into universities, but that this must be done for sound academic reasons, not as a piece of salesmanship. Suitability for university work is not simply a matter of intellectual: these may be a necessary condition, but they are certainly not sufficient. What is also required is a feeling for the importance of certain studies.

If large numbers of those of undergraduate age do not have this feeling, as Mr. Peterson is in fact admitting, and as we should agree, then they are simply not suitable for university work. They will be well suited to other things; and if there are not enough of such things available, let us think about how they can best be developed. But let us not confuse this question with that of the future of the universities.

(Courtesy: "The Observer")

GAINING ENTHUSIASM

The secret of developing an enthusiastic personality is not so much learning to express enthusiasm as learning how to gain it.

When you are really interested in something and strongly in favour of it, your enthusiasm naturally bubbles over, and you cannot help but show it in your actions and conversation.

Sincerity is probably the key to the whole matter. If you are whole-heartedly interested in what you are doing, your enthusiasm will come naturally and express itself according to your personality.

—Conrad Hilton.

IS THE WORLD ROUND?

By Theodore Monod

Errors and prejudices die hard! Our school textbooks tell us that the world is round. And of course, physically speaking, it is round. It has the shape of a football. But on a ball one should be able to move about freely in any direction. When a green-fly goes for a walk on an orange, he can visit every part of it (and flies have more wanderlust than most people suppose): the two poles, the equators, the tropics. . . every fraction of the surface of the orange can be explored by our fly-geographer.

But how about the earth? For man, too, is curious. Down through the centuries, has he been able to follow his whims and his desires and to move about freely over the entire surface of the planet?

This brings me to a very important point: until a recent date, the earth, despite its shape, had never played the role of a sphere permitting free movement and communication in all directions. In this respect, it would be easier to compare it to a rectangular plateau, bounded on the North and South by the polar regions (sparsely or not at all inhabited), on the West by the Western shores of Europe and Africa, and on the East by the Western coast of the Americas. The opposition here is not between land and sea—for there is uninhabitable land, just as there are seas which have never divided anything. It is between what the Greeks called *oikumenē* (the inhabited earth) and no man's land: between what can be crossed and what cannot be crossed.

Despite its size, man has always been able to cross the Pacific Ocean. He crossed the Indian Ocean, too, but, until that recent date I mentioned, he was never able to cross the Atlantic. This Ocean was outside the area normally open to human movement and outside the "plateau" where, historically speaking, it did not even belong.

Roundabout Route

The Atlantic is a great dividing line in the history of mankind, a gigantic wound on the face of our planet, measuring 1,700 miles across at its narrowest point—between Dakar in Senegal and Natal in Brazil.

If you find this view of the world as

a "plateau" confusing, let us try another one. And instead of taking a bird's eye view, let's look at the world sideways on.

But even if you view it in a different perspective, you can't help making the same basic observation: the inhabited part of the world is now a rectangle rolled around a cylinder (for the two polar caps do not belong to it); the cylinder, however, is not closed. It is split by the great Atlantic trench. Of course, if we wanted to, we could travel from one side of the trench to the other—from Mexico to Senegal or from Brazil to Angola—but we would have to take the long way round. For centuries, it was impossible to cross this trench. A great pity, don't you think? After all, it would have been much simpler and shorter to go direct from Dakar to Rio de Janeiro instead by way of Ceylon, Sumatra, Tahiti and Easter Island. . .

That is why, in the history of races and civilizations, the west coast of Africa and the east coast of America appear as the extreme edges of the world, washed by a deserted ocean on which no sail was ever seen; for while animals and seeds crossed the Atlantic, men were unable to imitate them until a much later date.

It is difficult to understand why the Atlantic remained for so long an impassable obstacle cutting the world in two. As usual, the facts are too complex to be explained in a short space. However, it might be pointed out that the Atlantic has very few islands and archipelagos and that the people living on its shores had no experience of ocean navigation, perhaps because they lacked adequate boats. Had there been outrigger canoes in the Atlantic—as in the Indian and Pacific Oceans, where they were used in amazing voyages over distances sometimes greater than the width of the Atlantic—would the world have had to wait for the 15th Century and its caravels before going to see what was happening on the other side?

A Certain Christopher Columbus

For, as we all know, the impassable Atlantic was finally crossed, in 1492, when a certain Christopher Columbus, a sea captain by trade, left Palos in Spain on May 12, landing in the Bahamas on October 12

and then in Cuba. Finally, on April 5, 1498, he reached the American continent itself in what is now Venezuela.

We should remember these dates because they are among the most important in the whole history of mankind. For it was then, and only then, that lips of the great Atlantic wound were finally brought together and that Spanish navigators began to sew up the world with their great needle. They sewed it up for good because, since 1492, no one has ever forgotten the route to the West. The Atlantic became covered with shipping lanes, and studded with sails, then with smoke and clinkers and now oil patches.

While these sturdy stitches were healing the Atlantic wound, other navigators reached South Africa, rounded the Cape of Good Hope and made sail for India where they dealt a death blow to Moslem traders with fire and sword, when necessary. But the only really new part of this route was the western coast of Africa—that western edge of our famous “plateau”. Once the Europeans reached the Indian Ocean, they were on territory familiar to navigators from the East: Arabs, Indians and even Chinese.

For Vasco da Gama and his Portuguese, the worst was over when they rounded the Cape of Good Hope, and were able to take on board excellent Arab pilots who could direct them to Ormuz or Calicut. (The most famous of them all was Ibn Majid who steered Christian vessels from Africa to India. At the end of his life, he regretted the aid he had given the invaders, and recorded his sorrow in verse.)

For the Indian Ocean had always been part of the inhabited world. From ancient times the Mediterranean peoples had been in touch with the Red Sea, Arabia, the Persian Gulf, India and even more distant lands, such as Cochinchina. There was only one “forbidden zone” and it was always the same: the Atlantic Ocean, which you can picture as a trench, or as a wall splitting the world from North to South over a distance of more than 16,000 miles, and obliging the Aztec from Mexico who wanted to visit the Wolof in West Africa—or the boy from Mali who wished to see a real llama or a real cactus—to take the long way round through China and India.

Looking Towards Asia

As we can see the road was blocked. The sun priest in Mexico turns his back on the African farmer hoeing his field of millet. This means that both are looking towards Asia, that long band of arid or desert steppes, speckled with oases and occasionally cut by rivers, which stretches from Palestine to Mongolia, and where it seems the neolithic revolution (in agriculture, livestock-raising and pottery-making) originally took place. The echoes of this revolution, muted by great distance, ultimately reached the edges of the inhabited world in Africa and the Americas. There, enriched by local contributions, they led to the appearance of new civilizations.

With Christopher Columbus and his caravels, the trench was finally filled. The impassable wall was passed at the first attempt. Where there's a will there's nearly always a way. . . And the wall was not as hard to bring down as everyone had believed.

The road was now clear and the Atlantic wound healed. Man could go anywhere on earth. The world had finally become a ball, which just goes to prove that school textbooks are not completely wrong when they tell little children that “the earth is round”. . . (UNESCO)

MAN'S PATH TO OUTER SPACE

(Continued from page 599)

possible. Only after this problem had been solved was a manned flight into space permitted.

The results of this flight, as everybody knows, were conclusive: the space pilot returned safely and landed in a pre-determined area of the Soviet Union, proving that conditions necessary to life functions were maintained in the cabin and that the system for returning a spaceship from orbit guarantees the safety of manned flights.

Yuri Gagarin's flight constitutes a fresh contribution to world science, since it has made possible the solution of new problems and provided new information, important to science, direct from the lips of the pilot. It is still difficult to forecast all the consequences of this great exploit. One thing is certain—a new and glorious chapter has been opened in the study and conquest of outer space.

Suggestions for Improving Speech Through Class Activities

Everybody Talks, But How?

By MAGDALENE KRAMER

Professor of Speech, Teachers College, Columbia University

In the process of communication, speech is an instrument with which a person reveals much of his personality, his power of thought, his emotional state. It is the principal tool by which we adjust to other people, gain the cooperation of others.

The psychological effect of speech on individuals cannot be overemphasised. The choice of words, the pronunciation, the voice quality, the intonation, the rhythm, the tempo, and the volume are particularly significant in determining an individual's personal relations and status within a group.

If we honestly believe that every individual has a right to develop to the fullest his potentialities, time and attention should be given within the class-room to speaking, to listening, and to analysis.

In order to make such provision within the curriculum, it will be necessary to ask every classroom teacher to assume certain additional responsibilities. The speech specialist is needed to teach the children with serious speech problems and to advise and cooperate with the classroom teacher, but the classroom teacher will be in charge of teaching speech to all the children.

What responsibilities can the teacher assume?

1. Development of good voice and speech: The good teacher tries, first of all, to help the pupils develop speech that is audible, intelligible, and pleasant to hear.

In striving for improvement in ourselves and in our pupils, we can try to develop the most pleasant voice quality possible, by eliminating nasality, throatiness, harshness, flatness, thinness, high pitch, and huskiness. We can also aim for clear-cut articulation and correct pronunciation. The dictionary and the current pronunciation used by the educated people of the community may serve as guides in determining correct pronunciation.

The teacher's own voice and speech serve as models and are important teaching aids, especially in the primary grades, for children learn speech essentially through imitation. When the teacher at-

tempts to develop vocabulary in relation to objects or experiences, he should stress the correct pronunciation the first time the child hears and uses the new word.

It is advisable to teach largely through imitation until the child has built a positive attitude toward speech. This approach can be made through story-telling, sharing of poems, choral speaking, and rhythms.

Individual correction can come only after the child feels secure in speaking.

In the intermediate and upper grades as well as in the high school, direct attention needs to be given to speech improvement; and the purpose for doing so, clearly understood by the pupils.

Improvement may be assured by having all the members of the class (a) participate in a speaking experience, such as making oral reports or explaining a process of some type; (b) analyse with the teacher the speech needs of the group which may be greater audibility, projection, or more clear-cut articulation; (c) select from the stated needs the one which should receive immediate attention; (d) practise to attain the needed skill; (e) try out the improved skill in another speaking situation.

Pupils should always understand that practice on a particular skill is for the purpose of using that skill more effectively in speaking.

2. Communication of ideas and feelings: Speech is a tool for the sharing of thoughts and feelings. The close relationship between speech and thinking must always be remembered, and teachers in the primary grades particularly need to be aware that speech and thinking can be developed side by side.

If a teacher understands the developmental process of each, he can direct the learning so that speech will grow as thinking grows. For example, when a child is ready in his thinking to formulate compound and complex sentences, the teacher can be ready to show him how an involved thought can be well expressed orally.

It is essential that everyone be taught to express his ideas clearly and concisely.

A teacher can help pupils to cultivate effective communication by emphasising the value of choosing the exactly right word to convey a certain meaning.

A teacher can be of further assistance by stressing the fact that oral expression should differ from written expression in sentence structure, logical organization of ideas, and psychological appeal.

If communication is to be complete, considerable stress must also be given to helping the listener analyse ideas. Our future citizens must be prepared to recognise false assumptions, incorrect analogies, illogical reasoning; to distinguish between fact and opinion, reasoning and emotional appeal.

Students can listen to speeches given over the radio, on television, and from the platform, always with the purpose of understanding and evaluating.

In a group discussion, students can seek to discover why the ideas of one student are more readily accepted than those of another student, although the ideas are of equal worth. What speech characteristics of the one student cause his ideas to be received favourably? What speech characteristics cause the students to hesitate to recognise the other student's contribution?

3. Development of techniques for speaking situations: To be successful in a speaking situation one must have some knowledge of the rules of the game and a command of basic techniques.

Speaking experiences, already an integral part of the classroom work, may be similar from the kindergarten through the high school, but each year the pupil ought to show progress in acquiring more knowledge and more skill in speaking to an audience, large or small; speaking in a give-and-take situation; reading aloud; creating a role in a play.

On the lower elementary level, speaking to an audience may involve sharing an experience with the class, explaining a procedure, or describing a toy or a trip.

In the intermediate grades and junior and senior high school, the speaking experiences may well include, in addition to those already mentioned, presiding at assembly, introducing speakers, giving specific directions, presenting evidence to support a point of view, appealing for action

on a certain proposition or situation, giving an after-dinner speech, presenting or accepting an award.

In order to cultivate facility in a give-and-take speaking situation, attention ought to be given, at all school levels, to conversation, discussion, argumentation, interviewing, and parliamentary procedure.

In addition to the special techniques required, the good teacher also emphasises the following: the importance of having something worthwhile to say and of being a good listener; the difference between discussing all sides of a controversial issue and merely arguing the rightness of one side of a proposition; and the need for knowledge about a subject as a basis for discussion or debate.

Everyone should learn to read aloud effectively, not only because of the practical value of his ability in reading minutes of a meeting, committee reports, and the like, but also because of its aesthetic value in reading stories, poems, essays, or dramas. The full import of many literary selections, especially poems, can be expressed only through reading them aloud.

Group reading or choral speaking is an activity greatly enjoyed by pupils at all levels: all types of children may take part and so may improve their speaking and their appreciation of literature.

Storytelling is also valuable in arousing the imagination and cultivating a love of literature. Pupils on the upper level may profit from the experience of telling stories to younger children.

All children may well have opportunities to participate in dramatic play, creative dramatics, and formalised dramatics. What fun a child has in just pretending to be someone else! What fun it is to build a play from a story, an event, or a classroom celebration! How the imagination may be stirred and speech improved when a pupil creates a character in a play!

4. Provision of special help for children with speech problems: It is hoped that each community will have at least one speech specialist who will (a) make a survey to locate the children with serious speech problems, such as stuttering, lisping, delayed speech, cleft-palate speech, speech of the hard of hearing, speech accompanying cerebral palsy; (b) plan and

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New Jobs For The Enzyme

By Harland Manchester

One of science's most exciting quests today, ranking in importance with nuclear fission, is the research into enzymes. Having found that these submicroscopic particles are essential to the functioning of all living things, scientists have already put them to life-saving and money-saving use in medicine and industry, and believe that further discoveries should result in a flood of new uses.

Enzymes are complex protein molecules which behave as catalysts—that is, they speed chemical processes in the stuff of life without being changed themselves. There are thousands of enzymes in the body, most of them assigned to one specific task.

An enzyme in the salvia enables it to break down some of the starch in food into sugar. The stomach cannot digest food without the aid of the enzyme pepsin. Other enzymes help to complete the conversion of proteins into amino acids which the body can utilize, and still others promote fat digestion. If your nose itches, the itching is set off by a special enzyme; a hundred more enzymes make it possible to lift your hand and scratch. Without enzymes we would die, and if some of them won't work we become ill.

In industry, enzymes are being called on to speed all manner of chemical processes. One type, used to supplement the natural enzymes in malt, hastens the brewing process. Another will remove flavour-impairing oxygen from the air in the bottle. Chilled beer once had a hazy look because certain proteins coagulated at low temperatures; now an enzyme is dissolving the particles.

Bottles of cider and other fruit drinks now use an enzyme to dissolve pectin, which formerly imparted a cloudiness to these beverages. Wine makers add the same enzyme to crushed grapes to make the juice less viscous and to increase the ultimate yield.

During the war powdered eggs shipped in bulk to the armed forces sometimes had a bad taste because of changes in their sugar content. Now an enzyme is used to prevent the change. This enzyme has been a big factor in the success of cake mixes which contain powdered eggs.

In weaving cotton goods, the warp is reinforced with starch to prevent breaking on the loom; then bleaching and dyeing. This job used to take hours. Now in 30 seconds an enzyme splits the starch into sugar, which can be quickly flushed out. Other enzymes used by dry-cleaners remove spots of egg, blood, beer and coffee.

In making coated paper, a mixture of starch and clay is applied, and the paper is passed through steel rollers to give the glossy finish. Large starch molecules would result in a pasty mess, and once an expensive special starch was needed—to provide smooth flow and uniform adhesiveness. Now a starch-splitting enzyme, used on ordinary starch, performs both functions, thus saving paper mills substantial sums.

The word "enzyme" (from the Greek *zyme*, leaven) was coined years ago when scientists knew little about these substances except that they occurred in yeasts and moulds. Then, in 1897, Eduard Buchner, a German chemist, ground up some yeast cells, squeezed out the juice and obtained something which would convert sugar into alcohol. For this discovery he won a Nobel Prize, and other scientists took up the difficult task of isolating a pure enzyme. This was finally achieved in 1926 by Doctor James Sumner, of Cornell University, who later won a Nobel Prize for extracting from the jack bean a pure enzyme in crystal form which would break down urea.

In the early 1930's Dr. William Tillett, of New York University, discovered in a common strain of streptococcus an unknown something that would dissolve blood clots. After years of work he and his associates succeeded in isolating and purifying two enzymes from the dangerous streptococcus germs. Together they attack the proteins of which blood clots and pus are composed.

Now the streptococci are being grown in 1,000-gallon laboratory tanks and the purified enzyme drug has been used successfully in hundreds of cases where debris must be removed and swelling reduced. In severe burns, osteomyelitis, carbuncles, superficial ulcers and some types of sinus infections this enzyme scavenger gets at

of pus and dead tissue, leaving live tissue untouched. While not a healer, it speeds recovery by clearing the way for antibiotics.

Another enzyme, trypsin, obtained from the pancreatic glands of animals, is being tried out to clear up bruises and swellings.

Many companies are extracting enzymes from all sorts of raw materials—moulds, plants, animal organs, bacteria. One big brewery, for example, runs an "enzyme farm", where it produces its own enzymes, plus others for industry and medical research. The brewery enzyme-farmers begin by mixing vats of carefully balanced rations of proteins, carbohydrates and minerals in solution. They sterilize this food, then "seed" it with a pedigree mould or bacteria of the type that will produce the enzymes required.

Hundreds of moulds and bacteria of blue-blooded lineage can be obtained from a U.S. Department of Agriculture laboratory, which maintains one of the world's largest "libraries" of micro-organisms. The bacteria "seed" eats its rations and grows prodigiously for two or three days. The liquid is then filtered out, and the enzyme material is either precipitated, dried and ground to a powder, or packed as a concentrated liquid.

We may expect giant strides in the field of enzymes, perhaps within the next decade, as the fruit of today's basic research. Most scientists have concerned themselves with individual enzymes; now Dr. David Green and his associates at the University of Wisconsin's Institute for Enzyme Research have found that a large group of body enzymes works in complex teams, and that a fabulous package of interrelated enzymes called a mitochondrion is the ultimate power plant of key chemical functions. Fuel supplied by the blood is processed by this intricate plant to provide power for every muscle movement, every heartbeat, every plan or dream conceived by the brain.

The Wisconsin scientists have extracted these tiny "factories" from animal tissue and kept them in a kind of oxygen tent to study their action. As a result, the Wisconsin group has already been able to recreate the steps by which nine enzymes work together to convert fatty acids into

body heat and energy, virtually duplicating a basic life process in the laboratory.

"Some day", says Dr. Green, "when we understand exactly how enzymes are built and how they operate in the body, we shall be able to trace the process of malignant growth and be able to do something about it. Treatment of many other diseases will be clearly indicated. That will be one of the greatest events in the history of man, for it will bring about a revolution in medicine. I believe this may happen within our lifetime."

EVERYBODY TALKS, BUT HOW?

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carry out a remedial speech programme for these children; (c) cooperate with the classroom teacher in formulating a speech programme for all children; (d) advise the classroom teacher and demonstrate speech procedure whenever necessary.

Finally, if in-service courses in speech for classroom teachers seem desirable, these should be provided.

The classroom teacher, on the other hand, needs to cooperate closely with the speech specialist. He should follow the plans, mutually formulated, for the child with the serious speech problem. He is responsible for the speech improvement of children with minor problems, such as high pitch, inadequate volume, substitutions and omissions of sounds, and poor voice quality. He needs to know how to utilise activities within the classroom in order to bring about speech improvement.

Speech plays so vital a part in the life of every individual that it is essential that the subject becomes part of the daily classroom work both on the elementary and high-school levels.

The activities necessary to teach speech are already included in the school programme. The great need is for classroom teachers who are prepared to teach speech. Teacher-preparing institutions and school administrators should meet this need so that every child can develop his powers of oral communication to their fullest potential.

When friendship is settled, you must trust; before it is formed, you must pass judgment. —Seneca

MODERN ENGLISH POETRY

By Prof. R. M. Dogra

Most of the readers used to the rhythmic patterns and melodies of Keats, Wordsworth, Byron and Shelley were at first puzzled, when they were confronted with modern poets whose accent is on content, and who relegate the form to a secondary place. Their poems are born of a very personal experience and their use of words is relatively private. So a great deal of modern poetry at first met with indifference and occasionally it excited hostility not because the opinions and feelings expressed in it are repugnant to the average man but because the reader feels compelled to argue that it is not poetry at all. People take time to be shaken out of fixed grooves of thought. Gradually much of that hostility has vanished; now it is felt these poets are saying things which are true and significant and which cannot be said in any other way.

Decay

Industrial changes have broken up the old culture based on agricultural economy. Parallel with this, there has been a decay; of the old moral and religious order and a change in the basis of education which has become more and more strictly scientific. Religion and classical learning, which once provided myths and legends, symbolizing the purposes of society and the role of the individual are pushed into the background, and the disorder weighs upon the serious poet. It is the theme of many of the poems of Ezra Pound and of T.S. Eliot in *Waste Land*.

Younger poets than Eliot and Pound may feel more acutely the inter-relation of culture and politics, but nevertheless, they would agree with W.H. Auden that poetry is not concerned with telling people what to do, but with extending the knowledge of good and evil, perhaps making the necessity of action more urgent and its nature more clear, but only leading us to the point where it is possible to make a rational and moral choice.

Intensity

Modern poetry has great compression and intensity. A culture adapted to the older aristocratic system of landed proprietors was crumbling in a world governed by big business. It was necessary to sift out from the mass of habits, institu-

tions and conventions, the traditions which were worth preserving.

What makes modern poetry obscure is the intellectual difficulty which arises from the poets' use of some little known fact or some idea hard to grasp. Unusual use of metaphor and deliberately fantastic use of words are additional hurdles.

The modern English poets experiment in new rhythms and new images; and their work reflects emotional, spiritual and sensuous experience; at times they write didactic and descriptive poems also; but they are mainly concerned with emotional intensity rather than music. Most of them are convinced of insanity of war, and describe it with a satirical touch.

Modern English poetry is limited in appeal. New patterns of thought are worked out in new verse. It abounds in novelty of thought, pattern, unfamiliar allusions and prosody. In short it is a supremely revolutionary period of English poetry.

Moral Conflict

Gerard Manly Hopkins is the father of modern English poetry. His work did not make a complete break with the poetry of the past. In rhythm and imagery as well as in thoughts and feelings, which he intended to express, he differed from most of the English poets of his time, but there was no sharp discontinuity. His poems express an important moral conflict, related to an outer social conflict. He evolved a style which expressed the tension and disorder which he found inside himself. His poetry revealed a sense of spiritual tension and frustration; it combined a powerful intellect with a strong sensuousness, and it had a bold originality of technique. God and his own soul, God and other souls, God and Nature, are some of his subjects.

T.S. Eliot, however, had the strongest influence in changing the nature of English poetry. He owes a great deal to the French symbolists, who regarded poetry as consisting in the musical evocation of moods, vague and subtle. His tones, metres and themes are influenced by them. Donne and other metaphysical poets also influenced him. According to him, the essential advantage is not to have a beautiful world with which to deal; it is to have a chaotic one.

beneath both beauty and ugliness: to see the boredom, horror and glory. His poetry is sensitive criticism of the spiritual state of our civilization. He thinks that ours is an age of emotional sterility, devoid of real purpose and haunted by fear. The only way out is that of humility and renunciation: the true purpose of life is fulness of living which cannot be achieved in this temporal world.

W. H. Auden, Day Lewis, Stephen Spender and Louis MacNeice are partly heirs of T. S. Eliot but they also run counter to his line of thinking: their aim was to cure the Waste Land. They have a revolutionary and dynamic poetic creed. They intend poetry to speak in a new language and rhythm. Its imagery should draw on modern life and its vocabulary on contemporary speech, and its rhythm should be nearer to that of natural speech. They meant their poetry to make greater call on intellect than on the emotion of their readers: all modern knowledge should be at their disposal. They were preoccupied with the sickness of the world and how to cure it. Day Lewis loved courage and strength. He has vigorously criticized the public school tradition, the Press, the church, and the politicians. Stephen Spender insisted that the value of life lay in the body as in the fiery soul. There is much in the machine age, which appealed to his sense of beauty. Louis MacNeice, like his fellows, grew up conscious of the social sickness, and the threat of war, but unlike them he never felt the assurance that he could heal the one and defy the other. He is longing for the possibilities of spontaneous living.

According to Stephen Spender, poetry must not become propaganda, the poet must concern himself with fundamental things, and see everything with a fresh vision. The poet living fully his own life must arouse men to a heightened sense of full living so that the individual might save himself from the dehumanizing pressure of machine age and its materialism.

The place of Dylan Thomas in the modern poetic gallery is very prominent. His poetry is rich concentrated but strongly emotional, informed by power of intellect and controlled by an artist of outstanding technical accomplishment.

In short, the modern poets have staged a complete break from the Victorian

ideas, technique and approach. Their outlook is coloured by realities of the post-war Europe. At times they are obscure, but you cannot appreciate any writer without understanding his idiom.

(Courtesy: 'The Tribune')

CAREER IN MERCHANT NAVY

Training facilities for young men to join the Merchant Navy have been considerably expanded since Independence.

The training ship "Dufferin", at Bombay, which trains boys to become navigating officers on board the ships, now admits 80 trainees per year instead of 50 some years ago.

The Dufferin provides a two-year course of pre-sea training. Boys are selected before they reach the age of 17.

The Directorate of Marine Engineering Training, with branches in Bombay and Calcutta, imparts a four-year course of training to young boys to equip them for service as engineers on board the ships.

Between them, the two establishments take in 100 young men per year.

The Nautical and Engineering College at Bombay imparts post-sea training to navigating officers and engineer officers to prepare them for examinations held by the Ministry of Transport for service on board the ships.

The training course at the Nautical and Engineering College is of a short duration. Within a year about 475 students complete their training at the institution.

The requirements of ratings for the Merchant Navy are met by the three training ships—'Bhadra' at Calcutta, 'Mekhal' at Vishakhapatnam and 'Navlakshi' at Navlakhi in Gujarat.

Between them, the three ships train 135 boys every month in dock and engine-room operations.

Boys between the ages of 18 and 22, with some knowledge of Hindi and English, are selected from all over the country for admission to these ships.

A Merchant Navy Training Board has been set up by the Government of India to advise them on all training problems and to supervise training imparted in the various navy establishments.

During the Third Plan it is proposed to spend about Rs. 50 lakhs on the expansion and improvement of training facilities for merchant sea-men.

Struggle For Indian Empire

By Dr. ATAL CHANDRA ROY

In this short article an attempt will be made to review the struggle for the empire in India among the European nations and the ultimate success of the English.

Of the four great European nations, the Portuguese were the first to appear in India in the 15th century followed by the Dutch and the English in the 16th century and by the French in the 17th century. All these European nations in the beginning of their commercial career went into the outer-world in search of markets and trade. Later, this desire developed into colonial ambition. The desire for a bigger place under the sun developed into a gigantic race among the European nations in the West as well as in the East which ultimately culminated into two world wars in the present century.

Defence Strategy

So far as India is concerned, in spite of her peculiar geographical position, defences could not remain immune from the colonial rivalries of the European nations. There had been invasions into India from the land side on many previous occasions. But from the development of European maritime activities and naval technique, the strategy of Indian defence shifted from the land to the sea. It would not be an exaggeration to say that as soon as India lost her command of the sea, she lost her independence. And she lost her independence not to the Turks nor to the Mughals but to a European nation—the English.

All the above mentioned European nations had more or less the same fighting instruments which they employed against one another in India as elsewhere. But ultimately the English proved themselves superior to their rivals.

"He who rules on the sea will shortly rule on the land also"—declared once Khairuddin Barbosa to Sultan Suleiman the Magnificent. The history of India illustrates this principle better than any other country. The fact of preponderant influence of the sea on Indian history cannot be disputed. Up to the 13th century the Indian waters were in Indian hands. Then the Arabs secured the control of the Indian waters. Still then the problem of Indian defence from the sea side did not arise as the Arabs were only commercial

navigators and not colonial enterprisers. But the entry of Vasco da Gama into the Indian sea in 1497 brought about a great change. Its significance lies not in the achievement in navigation of the Portuguese. It was something more. It brought into reality the problem of Indian defence from the sea side as the Portuguese kings looked upon the seas as their possessions. Because of their discovery of the oceanic route to India, the Portuguese claimed an exclusive right over the Indian seas. This was the beginning of the colonial rivalries of the Europeans in India. In 1509 the Portuguese after many hazards succeeded in establishing their supremacy in the Indian Ocean. In the same year Albuquerque was appointed as Governor of the Portuguese possessions in India.

Portuguese Power

It was with Albuquerque that the Europe's Empire in Asia began. Unlike his predecessors, who were opposed to the policy of conquests in the Eastern waters, Albuquerque was bent upon founding a Portuguese empire in the East. He was familiar with the Indian Ocean and possessed a considerable knowledge of its problems before he was appointed as a Governor. He made all possible efforts to control the main routes radiating from the Red Sea and the Arabian Sea and to create impregnable bases on the strategic points for an unchallenged mastery over the Indian Ocean. And in this attempt he achieved a grand success. The occupation of Goa in 1510 gave him an absolute mastery over the Arabian Sea. "The Governor now turned the key of India in his king's favour." By annexing Socotra in the Red Sea, by holding control over Ormuz in the Persian Gulf, by establishing friendly relations with the king of Pegu and some Indian princes and by holding Malacca in the Eastern Seas, Albuquerque succeeded in establishing a grand and impregnable strategy against other European rivals which remained unshaken so long as the Portuguese naval power remained powerful in Europe.

From the 17th century with the decline of the Portuguese power in Europe, their hold on the Indian Ocean began to lose its grip. It was, of course, not due to any defect in the system of defence. Their fall

as an oceanic power was due to the breakdown of the political machinery of the Lisbon Government; the insubordination and intrigue of the Portuguese captains in India, their financial chaos in India, their religious fanaticism, their moral degradation, the lukewarm support of the Portuguese King to the Eastern empire and above all their inability to maintain their supremacy in the Atlantic Ocean. Further, they could not produce statesman or administrator of outstanding ability after Albuquerque when they enjoyed undisputed mastery of the Indian seas. "The sense of security which the mastery of the seas gave to the Portuguese was their undoing" (Panikkar—**Survey of Indian History**). From the 17th century the strategy for the control of the Indian Ocean shifted from the Red Sea and the Arabian Sea to the Atlantic Ocean. It was only when the Portuguese lost control in the Atlantic that their system of defence in the East broke down.

In the period of the Portuguese decline in Europe, the other European nations—the Dutch, the English and the French—"all trained in the same hard Atlantic School" (Philips—**India**) sailed into the Indian seas from the Atlantic side. Of these nations, only the English followed the Portuguese system in India with remarkable success. It was on the foundation of the Portuguese system that the English at last built up not only her commercial but also her continental Empire in India.

Dutch In India

But the first of the three later European colonisers, to take advantage of the changed position were the Dutch. The growing weakness of the Portuguese was revealed to the Dutch. In 1599 the first Dutch fleet commanded by Houtman set out for the East. From 1596 successive voyages were undertaken. In 1602 a powerful Dutch East India Company was formed with the full backing of the State. In 1604 a treaty was concluded between the Zamorin of Calicut and the Dutch "with a view to the expulsion of the Portuguese from the territory of His Highness and the rest of India" (Panikar's—**India and the Indian Ocean**). But the Dutch found the Portuguese firmly established at all strategic centres of Indian Ocean. So they abandoned the attempt to strike at the Portuguese power directly in India. Instead they proceeded to the East

Indies and shortly with their superior naval technique, snips and weapons, crippled Portuguese power in that region and established themselves at Batavia. Their determination to exclude all other European rivals from their chosen stronghold at Batavia made the English turn to the mainland of India. But the English still retained their hold in European waters. "Had not England held her own in European waters her eastern ventures would have failed altogether" (Philips—**op. cit.**).

The Dutch, however, did not give up their hopes of ousting the Portuguese from Indian waters. They occupied Malacca in 1641 which gave the Dutch an open door to the East and thus "shattered one of the main pillars of Albuquerque's structure". After Malacca, Colombo fell into the hands of the Dutch. The political power of the Portuguese melted away after the Dutch occupation of Ceylon. Cochin next fell into their hands leaving the Portuguese with Goa only. Although the Dutch succeeded in a degree to the heritage of Albuquerque, they failed however to establish their hold in the Indian Ocean. And that was one of the reasons of their easy defeat in the hands of the English and the French.

In their subsequent fights with the English, the Dutch failed miserably to bring up their reinforcement from their distant base at Batavia. It would not be true to say that the Hollanders were ignorant of their weak position in the Indian seas. In fact, often the Dutch Captains and Governors in the East made repeated appeals to the Home Government at Amsterdam thus "we must be prepared to maintain our supremacy at sea." But the lukewarm support of the Home Government made the cause of the Hollanders in India hopeless. Their defeat by the English in 1759 in Bengal completed the collapse of the Dutch. Their inability to bring reinforcements from Batavia in time; their false reliance upon the support of the Indian prince like Mir Jafar on the one hand, and the timely march of the English on the other hand accounted for the collapse of the Dutch power in India. Although the Dutch were powerful militarily to protect their territory, they were certainly not strong enough to compete in any way on the mainland of India with the land power of the Mughal empire. Moreover as a result of the rise of France, the Dutch lost their position of

importance in the Atlantic. And as soon as they lost it they disappeared from the Indian stage.

The English and the French followed in the Hollanders' wake. In their mercantile career, the English first came into clash with the Portuguese and then with the Dutch. The English profited much by the Portuguese and Dutch experiments in using sea-power. Moreover they followed the Albuquerque system of winning over the Indian princes on the coast to secure the safety of their settlements and to obtain the strategic points in the Indian seas. By the time the French had reached India in 1664, the English had already established their supremacy in the Indian waters. Till that time the question of political supremacy in India did not arise in the mind of the English. Meanwhile the French Company had established their hold in Malabar and Coromandel coast with Pondicherry as their main stronghold. Unlike the Dutch and the English companies, the French company was the product not of a spontaneous urge to trade in the Eastern world, but of the deliberate state policy of the French Government. Its policy and strength was almost dependent upon the ebb and flow of politics in Paris.

With the appearance of the French in India the real struggle for the Indian empire began. The English and the French were both Atlantic powers, having enormous skill in maritime activities and valuable knowledge in naval warfare. Although the French did not possess strategic points in the Indian Ocean to that extent as the English had they nonetheless began well. Their base at Mauritius, although 2000 miles away was yet equal to their need. Moreover, they had the full backing of the French Government which was willing to provide sufficient forces in ships and soldiers to deal with the English. On the other hand, the English had neither sufficient fleet nor soldiers to resist the French both on land and sea.

So during the Austrian war in Europe which inevitably spread to the East, the English did not fare well and suffered in the hands of their rivals. The consequences of this war failed to impress the Paris Government, while in London clearer views prevailed, for the Court of Directors there came to the conclusion that if they failed to increase sea-power, they would

lose their settlements in India. Hence keen enthusiasm was felt in London in creating new battleships and the London Government supplied the Company with a considerable number of war vessels. On the other hand, nothing was done in Paris to reinforce the French Company in India. As a result, in the Seven Years' War in Europe and the Carnatic wars in India, the English fought from a more superior position driving the French fleet to take refuge at Mauritius and easily capturing Pondicherry. The hope of the French to establish an empire in India was lost and the supremacy of the English over the other European rivals was almost assured.

Let us analyse the factors which led to the failure of the French and the ultimate success of the English in India in the nineteenth century.

French Failure

Of the four European nations who came to India, the French were the first to conceive the ambitious project of founding an empire. The condition in India in the mid part of 18th century was favourable to the French ambition. Moreover, they were fortunate in having a man of genius with them—Dupleix. Ambitious, strong-willed and resourceful with over 20 years' experience of Indian conditions Dupleix first saw the opportunities of the French becoming an Indian power. It was he who first showed the way of intervening in the internal disputes of the Indian princes. But at last he failed. There is difference of opinion about the causes of the failure of Dupleix. His apologists like Henry Martin hold that Dupleix was the first to realise the inevitable result of the contact between the Static Societies of the East and the progressive societies of Europe. Dupleix believed it rightly that India was to be conquered not by the Asians but by the Europeans. In the opinion of Martin, his failure was due to the apathy and negligence of the French Government. In the words of Martin "There is not a single instance in modern history of a nation being betrayed to this extent by its own Government" (Sen—French in India). On the other hand, Dupleix's critic Alfred Martineau believes that Dupleix did not come to India with any fixed motive of empire-building. Rather he was driven to this project by force of circumstances. Martineau observed

that it was the want of money or insufficiency of funds coming from France that compelled Dupleix to have a fixed territorial revenue to defray the expenses of the French colonists in India. Hence he came to conceive the ambitious project of building up a colonial empire.

For the causes of the failure of the French, Martineau lays emphasis on the wrong judgment and obstinacy of Dupleix (Sen—op. cit.). To his wrong judgment and obstinacy, it might be added that Dupleix had no idea of naval power, the most essential factor in any scheme of European dominion in India. "His Scheme", writes Panikkar "was doomed to failure from the beginning as the structure which Dupleix desired to raise lacked the foundation of naval support. Nor could he understand its importance" (*India and the Indian Ocean*). Dupleix made a great blunder in not appreciating the brilliant success of La Bourdonnais against the English in Madras. "If La Bourdonnais' success could have been exploited and the English evicted permanently from the coast, the history of India would have been different. But Dupleix spinning his cobwebs and chasing the mirage of an empire on land without an adequate realisation of naval strategy was not the man for it" (Panikkar—op. cit.). As a matter of fact, with the departure of La Bourdonnais at the insistence of Dupleix, the command of the sea was again left to the English.

It has been argued by some that the French Government and the Company failed to appreciate the importance of Dupleix's project. But it is not really true. It was for his reverses in the Carnatic that Dupleix was recalled. In fact, there was no indifference on the part of the French Government to the project of Dupleix. Despite their urgent needs in Europe and America, the French Government never hesitated in sending troops and fleet to the French in India during the Seven Years' War. The choice of Lally in place of Dupleix was the mistake that the French Government made. It was the bad leadership of Lally that was responsible for the disaster of the French in India. So far as Dupleix is concerned, it should be noted that his policy of empire-building itself was not unsound. "It was entirely the modern theory of colonisation, a theory which triumphed after his death"—(Sen—op. cit.). But unfortunately the policy was in-

opportune at a time when it was conceived. Further, Dupleix made a great blunder in relying upon the military and financial assistance of the Indian princes for raising troops and defraying their expenses. As soon as these assistance ceased to come from the native courts the French power in India collapsed. The French in India only intrigued and never played an effective part. When later, as in the case of Haider Ali the French co-operated with the enemies of the English only in a subordinate capacity and always played the second fiddle.

Another potent factor of the failure of the French was the lack of integrity and unity of command in the French camp. "The rashness and arrogance of Lally, the violent discord between Lally and the Company's officers at Pondicherry, the bad choice of officers" (Sen—op. cit.) contributed to their defeat to a large extent. In 1782 the French Commander Suffren had to suffer greatly from the disobedience and indiscipline of the French captains and soldiers at a time of sure victory.

While on the other hand, the English presented a different picture. The Company and its share-holders were all along enthusiastic about the adventures of their servants in India, supplying them with men and money and advising them in critical times. There was absolute integrity and unity of command in the English camp and they never repeated the blunders committed by the French. They relied more on their own resources than on the generosity of the Indian princes. Like the French, the English never played in a subordinate capacity in their dealings with their Indian friends. In the words of Voltaire, "The real cause (of the failure of the French) was the superiority of the English fleet, the carefulness and perseverance of that nation, its credit, its ready money and that spirit of patriotism which is stronger in the long run than the trading spirit and the greed for riches" (quoted in Sen—op. cit.). In short, "the British summed up the naval and military experiences of all the European Companies in the East" (Phillips—op. cit.), and profited much by the French discovery of the superiority of European land forces which accounted for their ultimate success in India.

(Courtesy: 'The Hindustan Standard')

IDEOLOGY OF SARVODAYA

By JAYAPRAKASH NARAYAN

Bhoodan is not a sectional, rural, national movement, though it may have local application. It is universally applicable to the entire human race. It aims at the good of all which includes my good also. It does not exclude my personality. If everyone's good is achieved your good is also automatically achieved. When it does not exclude anyone, then what justification can there be for any individual to remain aloof from it or to have objection to it?

Lack of correct understanding of the basic ideology of this movement only can make one say that one is not interested in it. Every one of us should say that we are for Sarvodaya, i.e., the good of all. What is good for all is good for me also.

Why should we want the good of all? Is it at all possible? There are two answers to the first question: one is philosophical and the other is practical. The philosophical answer is that this difference which we experience today is only an appearance, and an unreality. In reality all of us are one. We may have different bodies, different complexions, different occupations, different nationalities.

Fundamental Truth

All these differences are there, but we are human. My real 'I' and your real 'I' are the same. I am something different, my body, hand, eye etc. That 'I' by whatever name you call it is one. It is the fundamental truth. Because of this fundamental unity which lies under diversity, we should desire the good of all. My good is your good, and your good is mine. If I suffer you suffer too. If I go down you also go down. If we understand this fundamental unity we would automatically desire the good of all.

Now the practical answer: Suppose an epidemic breaks out in your city; can anyone say, "I have taken all necessary precautions that it does not come to my house." No one is sure of that. The only guarantee, the only perfect insurance against the epidemic is that your city is completely free from it. If you have both the rich and the poor, happy and unhappy at the same time in society, can anyone be sure that even though one is happy today, one may not be unhappy tomorrow? One

who is rich today can become poor tomorrow. A nation which is proud of its wealth today can it be sure that it will be the same tomorrow?

Hitler challenged the whole world single-handed but we all know that he had to commit suicide at the end. We have witnessed the rise and fall of nations in history. There cannot be only a fall or a rise. So long as there are happiness and unhappiness, wealth and poverty in society, you will not be sure what you will be tomorrow.

Self-interest

So even in your enlightened self-interest you should form a society in which everyone's self-interest is secured. If there is educated unemployment in India, you may not know that your son will be a prey to this disease. You will be sure of employment only when unemployment is banned from society. So the good of all is a guarantee of our own individual good. So, for our own good everyone should work for Sarvodaya.

What is the good of all? There are thieves, blackmarketeers, exploiters in society. One might ask how you can talk of good of these people! Do you want to give freedom to all these? There is no doubt that these people today are doing wrong, they have gone astray, they have lost their way, and are following a path of evil. So their good consists in weaning them away from that path and not in punishing them. We should change the circumstances so that people may not go wrong.

If your son falls into bad company, there is every possibility that he may go wrong. But it is not the body who is responsible for it but the circumstances in which he has to live. A poor man who has to save his children starving is driven by hunger to steal. Evil circumstances induce people to commit just as we treat sick persons in hospital. Give them love and achieve the good of them.

Correcting Criminals

Modern law says that punishment is not good. What are you going to achieve by punishing the evil-doers? By hanging such persons you are hanging and condemning yourself. In Russia there is an

mercy for political offenders, they receive the most barbaric and brutal treatment which deserve strongest condemnation from all. But criminals in Russia are treated as citizens. They are given opportunity to correct themselves, they are put to work. Just like that rich people in society can also be given opportunity to correct themselves.

Accumulation of wealth is not possible by virtue. That is why Christ said: "It is easier for a camel to pass through a needle's eye than for a rich man to enter the Kingdom of Heaven." Christ would not condemn anyone unnecessarily. Everyone of you would like to amass as much of wealth as possible and become a multi-millionaire. Even the poor people want to be rich. But we all know, that wealth cannot be amassed except by exploitation. We are all middle-class people and we certainly take more than what we should, so we are also exploiters.

Every man is born with certain potentialities and tendencies, of good and bad qualities. Our good consists in our being guaranteed the fullest possible scope for the development of all virtues in us. If we are given this opportunity everyone can achieve his good. How can this be done? Let us take the history of Europe. There was feudal society in Europe for a hundred years; then there were conflicts, and revolutions, in which feudalism was finally defeated.

One character of feudalism is that every individual was bound by certain obligations; there was no freedom for the individual. So concepts of laissez faire to let everyone do what he likes and to let everyone go wherever he wants came to prevail. The idea of freedom was expressed through bourgeois revolution or capitalistic revolution.

No Compulsion

It was assumed that if everyone is given freedom to work for his own good, then automatically good of all would be achieved. Adam Smith was its prophet. He was a revolutionary in his own times. But history of the last 200 years is a tragic failure of "laissez faire." Theoretically the worker was free to move wherever he wanted, free to choose his occupation. But in practice, if he did not accept the wages offered to him, he had to starve.

One of the greatest literary figures of

this age, Anatole France, has written that "bourgeois law, in the majestic equality permits the rich as well as the poor to sleep under bridges, to beg or to steal." The history of the last 200 years is a history of new limitations, new regulations placed on the freedom of individual. Workers had to work for 18 hours a day in the factories. So factory laws came into existence. All these regulations have accumulated into three different political systems—(1) Welfare State (2) Socialist State (3) Communist State.

There are degrees of limitations in each of these three systems. If everyone is working for one's own good, the good of all can never be achieved. It can be possible only when everyone works not for one's own good but for the good of society. Can anyone claim that the good of all is achieved either in the welfare State or in the Socialist or Communist State? They do not achieve the object for which they have been made. It can be achieved when everyone works for the good of all, voluntarily and not compulsorily.

When there are two sections in society compellers and compelled, what good can be achieved of those who are compelled? What guarantee is there that those who have this power to compel will use it for the good of all? So we must create a society where there is no need for compulsion. Vinobaji has said that human beings are not sheep and we do not want mere shepherds. I am saying this not because any saint has said it but because I have come to that conclusion by studying history, that if we work for our own self-interest, it cannot be achieved and there is no guarantee that it will be achieved for ever.

Bhoodan-Gramdan concerns every one of us. There is an idea that human happiness, peace and well-being can be achieved only if we give up the idea of self interest and come to believe that our own good can be achieved only when we achieve the good of all. This is a very simple and noble idea. All great teachers of the world have said this. But it has to be practised. The Bhoodan-Gramdan movement is an attempt to practise this idea. It has to be started somewhere. India lives in the villages. If villages rise, India will rise. So Vinobaji started this movement in the villages. People often ask that cities being the cen-

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Radioisotopes In Medicine And Industry

By C. Taylor

Man has not yet learned fully to harness atomic power for his well being. The most important development in the nuclear field is the processing of radioisotopes which are already in use in innumerable ways—from measuring thickness of steel plates to catching thieves. Here the head of the Isotope Division, Atomic Energy Establishment Trombay, describes the nature and functions of isotopes.

What are radioisotopes? They are radioactive forms of ordinary matter. They give out invisible atomic rays, rather like X-rays.

To look at, a radioisotope may be a few drops of colourless liquid or a tiny piece of metal. If you could see its rays, they would be shooting out from the isotope in all directions like the sparks from a sparkler. The rays from radioisotopes can pass through solid materials, as X-rays do. This is the reason why they are so useful.

Whatever we do with a radioisotope, it goes on giving off rays, and we can use them to find where the isotope is and how much of it is present. We can do this even though it may be inside a pipe in an oil refinery or mixed up with metals in a piece of alloy steel or even circulating in the blood of a patient. There is no need to interfere in any way with whatever we are studying. The atomic radiations shine out from the radioisotope, and we measure them with a geiger counter held close by.

Chemical Behaviour

Radioisotopes are made by putting ordinary materials inside an atomic reactor, so that their atoms become charged by the intense radiation released from the uranium fuel rods. This makes them radioactive. At Trombay we do this in the reactor Apsara, and shall soon be doing it in the powerful new Canada-India reactor.

We can make almost anything radioactive in this way. A piece of ordinary iron gets changed into radio-iron, a sample of phosphorous turns into radio-phosphorous, and so on, each radioisotope sending out characteristic radiations in which it can be identified.

Each new radioactive substance is just like the equivalent ordinary substance, except for its radioactivity. Its chemical behaviour remains quite normal, and we can be sure that radio-iron, for example, will look and behave exactly like ordinary iron.

Radioactivity is in fact a sort of addi-

tional property, which can be added on to ordinary matter. With an atomic reactor, one can make radioactive versions of nearly all the natural elements.

These materials have several uses. Suppose a doctor wants to check up on the circulation in a patient's leg. He takes a minute amount of radio sodium, in the form of salt solution, and injects it into a vein.

He holds a geiger counter further along the leg, and measures the time before it starts to detect the radiation. He knows how long the blood should take to move along a normal leg, so this simple measurement at once tells him if anything is wrong with the leg he is testing.

A more important medical use of radioisotopes is to test the working of the thyroid gland which removes iodine from the blood and holds it in store. For the test, a patient swallows a measured amount of radio-iodine, and in a short time certain proportion of it becomes concentrated in his thyroid, just as ordinary iodine would. A geiger counter held close to the gland shows whether the amount it has absorbed is too much or too little.

At Trombay we make up capsules each holding the right amount of radioiodine for one of these pills. What the patient has to do is to swallow one of these pills, wait for it to be absorbed, and then sit still for a few minutes while a doctor makes the measurement. A hospital in Delhi has been particularly active in, developing this new aid to diagnosis.

These two medical uses of radioisotopes are examples of what is known as "technique." In each case the radioisotope is used to trace the movement of something. In the first example it was the blood in a vein, and in the second, iodine collecting in a thyroid gland.

Movement Of Silt

Tracer technique is one of the most important ways in which radioisotopes are being used not only in medicine, but in research and industry as well. We may

think of using radioisotopes whenever we want to know exactly what is happening in a complicated reaction or process.

In some cases, radioactive tracers give information which could not be got at all by any other method. Last year, our group in the Atomic Energy Establishment did a large-scale tracer experiment for the Bombay Port Trust, to get information about the movement of silt on the sea bed near Bombay.

We made some artificial silt, containing a radioisotope, and placed it on the sea bed. A radiation detector was lowered into the water and dragged along behind a tug. It was weighted so that it would stay on the sea bottom, and an electric cable brought up its signals to our team on the boat.

Day after day we used the detector to search for the radioactivity from the silt, and in this way we were able to trace its movements until it had spread out into a patch several miles across. This gave the hydraulic engineers accurate and detailed information about what happens when silt is dumped from a dredger.

A less scientific but no less practical use of the tracer method has been reported from America. A manufacturer of transistor radios suspected that some of his workers were smuggling the tiny sets out of the factory in their lunch boxes.

He ordered some radioactive screws and mixed them with the screws used in assembling the radios. A geiger counter near the door of the factory soon showed who was the thief.

These examples must serve to suggest how radioactive tracers are helping to serve practical problems. They can be regarded as a new tool for which ingenious engineers will find endless uses.

Measuring Things

An entirely different way of using radioisotopes is based on the fact that their radiations get weaker as they pass through matter. This effect can be used to measure things without touching them at all.

By using the atomic rays from an isotope instead of light rays, we can make the same method work with cardboard or aluminium or even steel. There are plenty of isotopes with rays energetic enough to pass through these materials.

A radioisotope thickness gauge has the isotope on one side of whatever is to be measured, and a radiation detector on the other. Electronic circuits find how much radiation is coming through, and a pointer shows what this means in terms of thickness.

As the information is in electrical form it can be used immediately to control machinery. Paper is often measured by an isotope gauge while it is actually running through the paper mill, and the electrical signals from the detector are used to make automatic adjustments to the rollers which control its thickness.

Isotopes are also being used to develop better kinds of foodgrains, to measure minute amounts of wear in machine tools, to find leaks in water mains, to make new and better kinds of rubber, to fight some forms of cancer, to solve long outstanding riddles in chemistry and biology, and indeed to do so many useful and various things that it is obvious that we are dealing here with one of the most important technical innovations of our time.

We cannot tell what the future holds, but we can be sure that the atom safely harnessed in the form of radioisotopes will continue to serve us well.

IDEOLOGY OF SARVODAYA

(Continued from page 619)

ties of culture, education, business and politics etc. so why didn't Vinobaji start this movement in cities? But it is applicable to cities also.

The message of Bhoodan is that you should share whatever you have, land, property, intellect, etc., with your neighbours. Ultimately every village will become an enlarged family. Then every nation, then the whole world would become one family. We have to practise this idea. It may be possible for saints to practise it alone. But for the common people Bhoodan and Sampattidan are the first steps. It is only partial sharing. But Gramdan is total sharing, at least of land, to be followed by sharing of other things.

The greatest friend of truth is time, her greatest enemy is prejudice, and her constant companion is humility.

—C. C. Colton

Socialist Pattern Of Indian Society

By Dr Raghuvira, M.P.

So far neither has the Indian National Congress nor has the Government of India sought to define the ideology of their brand of Socialism. The obvious reason is that it is not intended to be a dogma. It is intended to be developed in accordance with Indian ideals. It is too early to foresee its final shape.

The Indian background is the legacy of Mahatma Gandhi's thinking. Its central point is Ahimsa.

Ahimsa denotes an abhorrence of violence in all forms. When one looks back to the violent history of the establishment of societies and Governments oriented towards Socialism, one is led to the following ideological and methodological formulation for India:

(a) There shall be no liquidation of any classes or sections of society; (b) there shall be no concentration camps; (c) there shall be no mass brain-washings; (d) there shall be no mass spying. Children shall not spy against parents, wives against husbands, brothers against brothers and friends against friends; and (e) society shall be run not on suspicion but on love, not on fear but on emotional adjustments and harmony.

The second idea which governs Indian thinking is Rama Rajya or democracy. India is proud of being the largest democracy on the globe. It implies that:

(a) India shall not become a totalitarian State; (b) there shall be no regimentation of the people and their lives; (c) the individual shall retain the freedoms of speech, association and movement; and he shall be free to choose his profession and change it. He shall not be reduced to the position of just a wage-earner; (d) there shall be no dictatorship, not even of the proletariat; (e) there shall be all possible and practicable decentralizations and diversifications; (f) there shall be no doctrinaire approach. The approach shall be scientific, that is, based on experiment, always growing and changing; and (g) there shall be symbiosis between all sectors of society. Individuals, corporate bodies, co-operatives and the State shall put their forces together in order to maximize production. There shall be healthy rivalry and emulation, but no cutting out of the ground from under each other's feet.

People's Socialism

The third idea is that of Daridra-Narayana. It is the perception of divinity in those who have been exploited and down-trodden by the higher echelons of society. Standing by them and putting them on a higher pedestal so that they shall share the good things of life in an ever-rising process, must be the concern of new India. It may be termed People's Socialism.

An egalitarian society is not yet in sight. It was possible in primitive cultures and it may yet become possible in the future age of plenty when all goods, from needles to aeroplanes, may be produced in such measure that every member of the human race can possess and use them.

But at the present moment in this country we would be satisfied if a serious beginning is made for uplifting the bottom floor which is formed by the landless workers whose income is less than Rs. 100 a year. It must be raised to the current national level of Rs. 300 or, in terms of the average family of five, to Rs. 1,500 a year or Rs. 125 p.m. It is not to stop there but to go higher and higher. In order to achieve the above, there has to be reorganization in the allotments of the Plan. As the Plan stands the weaker sections of society which form 80 per cent of the population are still in the dark shadows of want and hunger.

We must not be oblivious of the following facts:

Middle classes with fixed incomes are also suffering; the bureaucratic machine is becoming the master. If it is not checked it will turn into a monster; rating of factory workers or proletariat as higher than the tillers of soil is not in consonance with the Indian genius; co-operatives are often frauds. These frauds are not unknown. They are open for everyone to see. In the cause of development of co-operatives, it is the bounden duty of society not to allow the frauds to continue. Genuine co-operation is a boon, while the opposite is a curse.

* * *
Truth is a good dog; but beware of barking too close to the heels of an error, lest you get your brains kicked out.

—Collette

WORK OF PARLIAMENT IN 1960

The Lok Sabha held three sessions in 1960 extending over a period of 162 days, out of which the House met on 121 days. The other House of Parliament, the Rajya Sabha, met in four sessions covering a period of 116 days out of which the House met on 86 days.

During the year, Parliament adopted 65 official bills after consideration lasting some 317 hours (in the two Houses). The Ministry of Finance with 18 bills leads the other Ministries followed by the Ministries of Home Affairs and Commerce and Industry with eight bills each.

The Ministries of Defence, Scientific Research and Cultural Affairs, Works, Housing and Supply and Information and Broadcasting had only one bill each while the Ministries of Steel, Mines and Fuel, Irrigation and Power and Community Development and Co-operation and the Department of Atomic Energy did not sponsor any bill.

Two bills sponsored by private members—one amending the Code of Criminal procedure and the other for supervision and control of orphanages and other charitable homes—were also put on the Statute Book by Parliament. During the year private members introduced 41 new bills, 34 in the Lok Sabha and 7 in the Rajya Sabha.

The Lok Sabha devoted over 32 hours to the consideration of the Budget and other financial matters—20 hours to the General Budget for 1960-61 and the remaining time to the consideration of supplementary demands for grants.

Over 130 hours were devoted by the Lok Sabha to the discussion and consideration of demands for grants for the expenditure of different Ministries.

The Ministries of Food and Agriculture and Community Development and Co-operation had the largest amount of time devoted to them—over 11 hours each. The demands for the Ministry of Law took the shortest time for consideration—about 4 hours.

Nearly 36 hours were spent on the consideration of the Railway budget and supplementary demands for the Railways as well as the Railway convention governing the relationship between the Railways and General Finance.

Nearly 160 hours of the Lok Sabha's time was taken up with the consideration of motions, reports and other activities,

mainly of non-financial nature. The discussion of the motion of thanks on the president's Address took more than 20 hours. (The President addresses the two Houses in a joint session at the start of the Budget Session).

Over 22 hours were devoted to the consideration of the Draft Outline of the Third Plan and nearly 20 hours on the international situation and foreign affairs.

In the Rajya Sabha, 15 hours were taken up with the consideration of the General Budget and nearly 13 hours with the discussion of the Railway Budget.

The House also devoted nearly 15 hours of its time to consideration of foreign policy, 13 hours to the examination of the Draft Outline of the Third Plan and 11 hours to the motion of thanks on the President's Address.

In the large sweep of subjects which attracted the attention of either or both Houses of Parliaments were activities like sports, democratic decentralisation and cloth prices.

The Department of Parliamentary Affairs plans and coordinates legislative and other official business in parliament in consultation with the Business Advisory Committee of each House.

Besides the deliberations on the floor of the House, Parliamentary work goes on in several committees. Apart from *ad hoc* committees to consider details of important bills, there are the Public Accounts Committee, representing both Houses, which scrutinises the details of expenditure of public funds, and the Estimates Committee, representing the Lok Sabha, which studies measures for economy, improvement in organisation and efficiency of the administration.

There are besides the Informal Consultative Committees attached to different Ministries, the meetings of which can be attended by members of both Houses and where matters of policy and working of administrative departments are examined in informal discussion with Ministers and senior officials. During 1960, 127 meetings of these committees were held.

During the winter-Session period, many members of Parliament go round different projects in the country to have a first hand acquaintance with the progress of development schemes. Nearly 50 projects were visited in 1960 by members in different batches.

Teachings of

MAHATMA



GANDHI

Q. Bring out clearly the fundamental difference regarding "Life and Universe" in the ideas of Gandhi and Marx.

Ans. For centuries, philosophers and scientists have sought to get at the primary root of the universe. But the exact link between life and universe is still beyond human perception even with the aid of scientific appliances.

When a road branches itself into two, even if the angle between two branches is less than five degrees at the base, after some miles, their ends will be away from each other by several miles. Similarly, the difference between the way of looking at life and the universe of Gandhi and that of Marx, and several others, appears up to a certain stage to be so much alike for practical purposes as to make one feel that the difference is as between half a dozen and six. It may also be remarked that this difference can be regarded as the basic difference between the ideas of Gandhiji and Marx, for all other differences whether of ends and means or of ideas about political, social, economic, or religious order, arise from this fundamental difference.

According to Gandhi, what we perceive as insentient matter, also, has its being in and by life, it has no existence independent of it; at any rate, in the absence of life none can testify to its existence. The universe rises, exists and disappears in life, which alone is, i.e., ever existent and imperishable. Therefore, Life alone is **Satya**—Truth—the ever-abiding principle. All other forms and forces, are so to say, rays or emanations from it; every one of them is subject to continuous change and total conversion or resolution from one form into one or more others.

But Marx holds that there is no evidence for believing that matter has its rise from, existence in, and return to an eternal substance called the Spirit and that without it the former could not exist. On the contrary, he observed facts of the universe and the history of evolution shows that for millions and millions of years life did not exist on our earth; that out of the billions of heavenly bodies known to astronomers,

it is doubtful if it exists in any form anywhere except on this earth.

Thus according to Gandhiji, the basic principle is life and not matter, whereas according to Marx, the basic principle is inert Matter and not Life.

Q. What is Absolute Ahimsa? Is it possible to follow it?

Ans. Absolute Ahimsa means perfect freedom from himsa, i.e., freedom from ill-will, anger and hate rooted in ignorance, and an overflowing, understanding love for all. From the point of view of complete ahimsa all violence in whatever form must be eschewed. But such non-violence is a perfect state and is reached only when mind, body and speech are in perfect co-ordination, which in Gandhiji's own words can, perhaps, be never reached. All ahimsa is a power and such absolute ahimsa is absolute power. But such absolute ahimsa is the attribute of God alone. It is not given to imperfect man to grasp the whole meaning of non-violence or to practise it in full, even as it is not possible for him to know Absolute Truth.

Besides, life is bound in a chain of destruction and himsa is an inherent necessity for the life of the body. So no one, while in the flesh, can be entirely free from himsa. Thus the very fact of his living, eating, drinking and moving about necessarily involves some life not only for sustaining his own body but also for protecting those under his care. This is, however, inevitable himsa and it has been regarded as permissible.

If the votary of ahimsa is to remain true to his faith, the inevitable himsa that he has to commit must be spontaneous, though not thoughtless, must be the lowest minimum, must be rooted in compassion and must have discrimination, restraint and detachment at its back. It must be committed after all remedies to avoid it are exhausted.

On the whole, the freer a man makes himself from himsa, the nearer is he to perfect ahimsa, i.e., to Absolute Truth or God.



VOCABULARY TEST

(All the following words are derived from Latin. Tick the word or phrase you believe to be nearest in meaning to the key word and then compare with the correct answers given below.)

1. **Augury**—A: dispute. B: altar. C: place of refuge. D: omen.

2. **Flagrant**—A: widely scattered. B: poisonous. C: scandalous. D: absurd.

3. **Ferret**—A: to search. B: trap. C: hide. D: flee.

4. **Impediment**—A: opposition. B: tool. C: obstruction. D: disparagement.

5. **Nomenclature**—A: adoption of a pen name. B: system of names. C: parliamentary rule. D: history of names.

6. **Cumulative**—A: serious. B: swollen. C: rich. D: steadily increasing.

7. **Pedantic**—A: hanging. B: making a needless display of learning. C: ignorant. D: solemn.

8. **Disparate**—A: radically different. B: discouraged. C: reckless. D: stingy.

9. **Regime**—A: order of procedure. B: system of government. C: recipe for cooking. D: peacefulness.

10. **Inimical**—A: favourable. B: unique. C: unfriendly. D: wicked.

11. **Deplete**—A: to flatten. B: conquer. C: finish. D: exhaust.

12. **Dispensation**—A: distribution. B: dismissal. C: surrender of power. D: delaying.

13. **Circuitous**—A: surrounded. B: dizzy. C: roundabout. D: deceptive.

14. **Scintilla**—A: tinsel. B: trace. C: veil. D: brilliant surface.

15. **Conversant**—A: well-mannered. B: talkative. C: argumentative. D: familiar.

16. **Vilify**—A: to lie. B: prove. C: defame. D: defraud.

17. **Noxious**—A: dark. B: injurious. C: hateful. D: evil-smelling.

18. **Cursory**—A: informal. B: penetrating. C: angry. D: rapid and superficial.

19. **Actuate**—A: to explain. B: put into action. C: furnish proof. D: prepare a financial statement.

20. **Flaccid**—A: flabby. B: jolly. C: calm. D: immoral.

2. **Flagrant**—C: Openly scandalous; notorious; as, **flagrant** injustice.

3. **Ferret**—A: To search (out) by keen and persevering investigation; as, to **ferret** out wrongdoers.

4. **Impediment**—C: An obstruction; that which hinders; as, an **impediment** in speech.

5. **Nomenclature**—B: A system of names or terms employed in an art or science, or by any authority or recognized group; as, the **nomenclature** of music.

6. **Cumulative**—D: Steadily increasing in volume, value or strength by addition or repetition; as, **cumulative** evidence.

7. **Pedantic**—B: Making a needless and tiresome display of learning; as, a **pedantic** critic.

8. **Disparate**—A: Radically different; unlike; dissimilar; as, **disparate** opinions.

9. **Regime**—B: A system of government or administration; as, the Franco **regime**.

10. **Inimical**—C: Unfriendly; unfavourable; as, a climate **inimical** to health.

11. **Deplete**—D: To exhaust; reduce or lessen; as, to **deplete** the treasury.

12. **Dispensation**—A: Distribution; act of dispensing or dealing out; as, the **dispensation** of justice.

13. **Circuitous**—C: Roundabout; indirect; as, a **circuitous** route.

14. **Scintilla**—B: A trace; iota; as, not a **scintilla** of truth.

15. **Conversant**—D: Familiar (with), as the result of study; as, to be **conversant** with the principles of nuclear physics.

16. **Vilify**—C: to defame; slander; as, to **vilify** a political opponent.

17. **Noxious**—B: Injurious; harmful; pernicious; as, **noxious** fumes.

18. **Cursory**—D: Rapid and superficial; without attention to detail; as, a **cursory** examination.

19. **Actuate**—B: To put into action or motion; as, to **actuate** a government inquiry.

20. **Flaccid**—A: Flabby; lacking firmness or elasticity; as, a **flaccid** music.

ANSWERS

1. **Augury**—D: An omen or portent; foretelling; as, an **augury** of success.

QUESTION BOX

In these columns we answer the queries from our readers. It may not be possible to answer each and every question but a considered reply is given to the selected questions. Personal queries should not be asked. Letters from our readers are welcome. These should be addressed to the Editor Question Box.

Q. Kindly answer the following questions:

(i) What is the difference between Money Bills and Financial Bills?

(ii) Is there any provision for the joint sitting of the two Houses of Parliament in the Constitution of India? Mention some such instances.

(Dharam Vir Guha, Calcutta)

Ans. (i) All Money Bills are Financial Bills, but all Financial Bills are not necessarily Money Bills. Bills containing only provisions dealing with imposition, abolition, regulation of a tax etc. are called Money Bills. If a Bill deals with any of these matters but does not deal exclusively with it, this will not be deemed a Money Bill, although it will be a Financial Bill. It may, however, be remarked that neither Money Bills, nor other Financial Bills can be introduced in the Council of States.

(ii) Joint sittings have been provided for to meet certain situations including the final disagreement between the two Chambers.

It is quite interesting to note that for the first time the two Houses of Parliament passed by acclamation the Dowry Prohibition Bill in a joint sitting, very recently on May 9, 1961.

Q. Kindly explain in brief about the "Security Council" of U.N.O.

(Mahabir Prasad, Dhanbad)

Ans. Security Council of the United Nations consists of eleven members (including China, France, the U.K., the U.S.A., and the U.S.S.R. as permanent members) and has the primary responsibility for the maintenance of international peace and security. The six non-permanent members are each elected for a two-year term. The members of the United Nations agree, under the United Nations Charter, to accept and carry out the decisions of the Council.

On procedural matters its decisions are made by an affirmative vote of seven members, but on all other matters this vote must include the concurring votes of the five permanent members. This is the device known as the 'veto' which the U.K., the U.S.A. and the U.S.S.R. accepted in the Yalta Agreement, in February 1945. When measures for the peaceful settlement of a dispute are being discussed a party to the dispute must abstain from voting.

The Security Council determines the existence of any threat to the peace, breach of the peace, or act of aggression. It makes recommendations or decides to take enforcement measures to maintain or restore calling on members either to apply measures not involving the use of communications) or to provide air, sea or land forces to deal with the offending nation. Member states can defend themselves, either individually or acting together, until the Security Council takes action.

Q. Kindly explain fully the Peace Corps Programme of President Kennedy.

(J. C. Azad, Burdwan)

Ans. Besides the professional American ambassadors abroad, President Kennedy is enlisting the aid of a large army of amateur ambassadors. He has established his now-famous Peace Corps—an immediate establishment of a programme to send Americans abroad to help the underdeveloped countries.

The main purpose of the Peace Corps is to enlist skilled men and women for voluntary, unpaid service in the underdeveloped countries of the world. They will receive only a sufficient allowance for their basic needs, figured by the standard of living of the country to which they will go. A small bonus payment will be put aside each month against their return to the U.S. after an average of two years' service abroad. The Corps will concentrate

STUDENTS EMPORIUM

SECRETS OF A GOOD MEMORY

Most people who complain of having a poor memory really only need to learn how to use the faculty properly.

Many of the things we claim to have forgotten were never really noted, learned, or memorised in the first instance.

We may be introduced to a person, for example, and be more concerned with the hat she is wearing than with her name. So when the necessity for recalling the name occurs, it evades us—not because we have forgotten but because no really strong and deep impression of it has been made on the mind.

The first secret of being able to remember things successfully therefore is attention. The deeper the impression, the more easily it will be recalled when required.

Aristotle, knowing nothing of what we know of the physiology of the brain, made a curiously profound remark when he said that the mind is like a wax tablet. So, if the impression is deep enough (through sound attention) we will recall it easily.

This explains why older people can often remember things which happened fifty or sixty years ago, but forget something which has been said to them only five minutes previously. It is not that the mind cannot remember, but that in old age it cannot with the same facility receive new impressions. The wax, so to speak, is hardened with age.

The vividness of the initial impression, then, determines to a great extent the ease with which we recall things. Obviously, a number of factors are involved here. Concentration is one of them.

A determined and undistracted effort to centre our attention on what we have to remember is most important. It is a truism that the mind can only entertain one idea at a time. Much of our memory difficulty springs from the fact that our mind has been wandering when the impression should have been made. A vague impression means a hazy memory.

Lack of concentration tends to become habitual; we must learn to replace it by the habit of concentration. Take for example, the commonly heard plaint: "I have no memory for names."

What this usually means is that a person has got into the habit of hearing names without listening to them. The face, or the opening words of the conversation, or the dress of the people concerned may be the thing which makes the deepest impression. Habitually, and unconsciously this becomes the pattern of our personal approach to others.

If our particular failing is a difficulty in remembering names, then it is a habit of attention to names that we must cultivate.

In due course we shall find that our initial curiosity about a stranger is his or her name. It will be as though we approached such a person saying to ourselves "Now, I wonder what his name is?" and then having heard it "So, that is his name!"

In the early stages of forming the habit, it may be well to say these things silently to ourselves. Our difficulty in remembering names will then soon disappear.

As well as concentration, we shall find that association, also is an important factor in the training of memory. If in our minds we can link an unfamiliar idea or word with a familiar one, the unfamiliar one will have a much better chance of being remembered.

For example, if the name of our house happens to be West View, we are likely to have little difficulty in remembering anyone whose surname is West. This association of ideas through words of similar or contrasting sounds and meanings can be a great aid in memorising.

Akin to this matter of the association of ideas is logical method in the arrangement of matter to be remembered. If there is a logical development of ideas, thought and argument in what is being said in a speech, for instance there will be little difficulty in delivering it.

I have often discovered that, at the end of a talk delivered without notes, I have forgotten to say something which I intended to say. But examination has invariably shown that it was something not essential to the development of the argument.

It was a "purple passage" or a good story dragged in, just because it was a good story, but not particularly relevant to the theme. In the logical pursuit of the argument it has naturally fallen out, and no real loss has been incurred.

Repetition is another important law of memory. A man who says, on the telephone, "Hello! George! Yes, George! All right, George. Certainly, George! Goodbye, George," and then puts the receiver down and says "That was George" is not likely to complain that he cannot remember names.

In an exaggerated form, that is an excellent example of the part which repetition plays in fixing something in the memory.

To go back to Aristotle's illustration, it is as though every repetition of any fact makes the groove in the soft wax tablet a little deeper, and so a little more firmly impressed on the memory.

Clearly, this matter of repetition is important again in the matter of learning. The more often a thing is repeated, the more likely it is to be retained and recalled when needed.

It is not merely the number of repetitions which is important, however, there is time factor involved, too, and this is not always realised by those who are anxious to learn, say, a part in a play. If we allow reasonable time to elapse between the repetitions, we shall find that the matter to be memorised sticks more firmly in the mind.

It is better, for example, to rehearse a speech once a day for a week, than it is to repeat it seven times immediately before the speech is to be made.

Also, in spite of the apparent popularity of last-minute swotting for an examination, this point shows that such a practice is less beneficial, and more burdensome to the mind, than the more protracted method of repetition of matter to be learned over a longer period prior to the examination.

A minister who prepares his Sunday

sermon on Friday does better than if he leaves it until Saturday.

Variation in the methods of learning is also advantageous, and tends to prevent the staleness that comes from too frequent repetition of matter in one particular way.

If a lesson can be not only read, but also repeated aloud, and perhaps in addition written down, memory is helped in a threefold way, instead of by a single method.

This is, of course, another form of repetition, but the element of difference in the manner of the repetition is of great value.

The final secret of successful memory is confidence. It is fatal to keep saying "I have such a poor memory."

Suggest to yourself a keen, retentive, unfaltering memory, and you will have taken a great step towards attaining it.

Too great a reliance on notes and memoranda impairs the memory. Trust your memory, and it will increasingly serve you well. (By 'John B Nettleship')

* * *

UNIVERSITY EDUCATION IN THE U.S.S.R.

Universities play an important part in training young specialists. The history of university education in the U.S.S.R. begins with the year 1775, when the first Russian university was opened in Moscow. Its founder, the great Russian scientist M. Lomonosov, wrote on its opening that it would make "for the growth of science and hence for the real benefit and glory of the country."

The scientist's hopes have come true. Moscow University has become a centre of science and education, and in the years it has functioned it has turned out thousands of specialists and reared a galaxy of outstanding scientists, writers and other public figures.

Throughout its history Moscow University has, in addition to being a higher educational establishment, been a centre of many cultural undertakings. Most of Moscow's bigger museums, such as the Historical, Polytechnical and Art museums, and many scientific and cultural societies had their origin in the university.

The university occupies an important place in the development of Russian science. Many scientific schools and trends

arose in it and many scientists have made inestimable contributions to the treasure-house of world science.

The Great October Revolution opened vast possibilities for the further growth of the university. Before the revolution the university had only four faculties: physics and mathematics, law, medicine, and history and philology. Today it has 12: history, philology, philosophy, economics, physics, mechanics and mathematics, chemistry, biology and soil science, geology, law, and journalism.

Moscow University is the country's biggest higher educational establishment, having on its rolls more than 20,000 students of 59 nationalities. On its teaching staff are hundreds of Members and Corresponding-Members of the U.S.S.R. Academy of Sciences, who have achieved great renown in their fields.

In 1955 the Soviet Union celebrated Moscow University's 200th anniversary. Shortly before the memorable date, the university was shifted to its grand building on Lenin Hills, one of the capital's most beautiful spots. The architectural ensemble includes some 400 buildings, and if you want to go through all the rooms of the university, you will have to cover more than 145 kilometres. The main building is 32 storeys high in the central part and its wings on the sides have eighteen and nine storeys. Some 6,000 undergraduates and graduate students live in separate rooms, which have all amenities. Undergraduates' rooms are eight square metres in area, and those of graduate students are twelve. Many students live in hostels situated in other parts of the capital.

Surrounding the university buildings are a young park, a botanical garden and reservoirs. The approaches to the main building are decorated with greenery and monumental sculptures, and together with the park and botanical garden the university takes up some 200 hectares.

Located in the main building besides laboratories, special study rooms and museums are the students' club with a hall seating 800, a swimming pool with stands for spectators, large and small gymnasiums and other rooms for physical culture and sport.

Such, in brief outline, is Moscow University, the original seat of university education in Russia.

Great credit for the development of Russian science and culture is due to Leningrad University, which was founded early in the 19th century. It has furnished the country with hundreds of talented men and women who occupied, or are now occupying, important places in Russian science, literature and art.

Among Russia's older universities are those in Kazan, Tomsk, Kharkov and Kiev. Before the revolution Russia had 10 universities in all, with a total register of about 40,000 students, and all, except Tomsk University, were located in the central part of the country.

In Soviet years, the universities, "geography" has changed radically. An outstanding event in the life of the peoples of Soviet Central Asia was the founding in 1920 of the Central Asian State University in the city of Tashkent. Moscow and Leningrad universities lent a helping hand by sending to the young university much equipment and textbooks, and many prominent representatives of Russian science went out to Tashkent to help develop higher education in Uzbekistan. The Central Asian University played an important role in training scientific personnel from among the native population of Soviet Central Asia.

The university has turned out several thousand specialists who have helped develop industry and agriculture in Central Asia, built electric stations and irrigation canals and opened new schools and higher educational institutions. The university has also been the parent of a number of new colleges, such as the medical, polytechnical and finance and economics institutes, which were founded on the basis of the university's faculties devoted to these sciences.

Following the establishment of the university in Tashkent, universities were opened in Alma Ata, the main city of the Kazakh Republic, and in ancient Samarkand, and after World War II in the capitals of Tajikistan, Kirghizia and Turkmenia. Where before the revolution the people had been almost 100 per cent illiterate, there are now thousands of schools, hundreds of specialized secondary schools and 84 higher educational establishments.

No Union Republic today is without its own university. In all, the country today has 39 universities with more than 200,000 students.

In a number of Union republics the universities have through their learned staffs and research centres helped to set up academies of sciences. For example out of the first 16 Members of the Georgian Academy of Sciences 13 were professors at Tbilisi University. This is true also in regard to the organisation of the Academies of Sciences of the Kzakh, Uzbek, Armenian, Azerbaijani and other republics.

(By 'M. Kruglyansky')

PATIENCE—THE GREATEST VIRTUE

Someone asked Pitt, Prime Minister of England: "What is the first virtue a statesman should possess? Is it will power? Is it intelligence?"

"No," said Pitt, "it's patience."

Of course, patience is not enough. Genius is also needed. But genius without patience would not go very far. An artist may have flashes of intuitive brilliance; he may be full of taste. Yet if he has no patience, he will never produce a general work.

Balzac and Tolstoi were men who suddenly as in a flash of lightning, could see before them the plan of a novel. However, the road to cover before the novel was completed remained a very long one. It meant that two hundred thousand words, sometimes five hundred thousand, had to be written in long hand; it meant that two hundred characters had to be delineated; it meant that the book would have to be revised ten times. Genius must have at its service an infinite capacity to work.

A great scientific discovery is sometimes made in a few seconds, but it is always because the scientist has been waiting for that blessed moment all his life. An experienced painter like Picasso is able to paint, in a few hours, a picture that will fetch enormous prices, but if you told him: "It did not take you much time to do it," he might answer quite rightly, as Whistler once did: "It took me fifty years."

Patience is even more necessary when the work to be done is team-work. A playwright is up against managers, comedians, decorators, stage hands. He must take into account the aptitude, and also the touchiness, of each man or woman. The movie director must conciliate the exigencies of technique, of capital and of art. At first sight it seems an impossible job. Thanks to miracles of patience it gets done and if

all goes well, a work of art may emerge at the end of the long strife.

Even worse is the plight of the great man of action, in politics or business. He made his plans very carefully, thought out every detail, made provision for every emergency. But however careful and painstaking, he remains at the mercy of a subordinate who does not understand the orders, of the madness of a crowd, of the panic of an army, of an earthquake, of a storm.

A man who built a big business and had a right to believe he had succeeded may suddenly find himself ruined, because the bottom fell off the market. There is nothing to be done except to begin all over again. The negotiator who sees the cloth of peace he had lovingly woven torn up by conflicting passions, what can he do if not to pick up the threads and to start anew? Patience is not only a virtue; it is the virtue without which all other virtues tumble.

(By Andre Maurois)

THE USE OF PREFIXES

It is interesting to note the shades of meaning introduced into our language by the use of prefixes. Consider, for example, a root word like **pose**, to place or put, and the wide variations of meaning given to it by the addition of different prefixes. As a result, we have:

purpose, to put forward;
compose, to put together;
impose, to put upon;
expose, to put out in the open;
oppose, to put against;
Transpose, to put across (i.e., change position);
dispose, to put away, or apart;
depose, to put down;
interpose, to put between.

This list also gives some indication of what these prefixes mean in themselves. It is a help to know this, as it can sometimes be a decisive factor when one is hesitating over the precise choice of a word. For instance, although no one is likely to confuse the meanings of **inform** and **conform**, it calls for a little more thought to distinguish between **impel** and **compel**, or **induce** and **conduce**.

The frequent prefix **com-** or **con-**, which has the sense of **together** or **with**, also appears in the form of **cor-**, **col-** or **co-**, as in **corroborate**, **collusion**, **collaborate**, **con-**

word **council** demonstrates a less obvious variation of the same prefix.

In- or **im-**, which is also modified to **ir-** or **il-** before the appropriate letters, is a little tricky as it can signify either **inwards** or a sense of intensification, as in **improve**, **inspire**, **illustrious**, **irradiate**, or on the other hand negation, as in **imperfect**, **indescribable**, **illiterate**, **irregular**.

DON'T MIX YOUR METAPHORS

A **metaphor** is a picturesque and imaginative way of describing anything in terms of something else; e.g. "The garden was a little bit of heaven."

If, however, we say "The garden was like a little bit of heaven," the figure of speech then becomes a **simile**, because instead of actually describing the subject in terms of something else, we are saying that it is **like** or **similar to** it.

Beware of mixing your metaphors by slipping from one line of thought to another in mid-sentence, or you will find yourself writing such confused expressions as "It is our duty to pilot the good ship of state along the thorny and rough road which it must plough to prosperity."

Original and interesting metaphors add colour to our writing, but many of them become such overworked clichés as to lose all their vitality and vividness.

In his book **ABC of Plain Words** (Published by H.M.S.O.), Sir Ernest Gowers writes:

"New metaphors tend to be used indiscriminately and soon get stale, but not before they have elbowed out words perhaps more commonplace but with meanings more precise. Sometimes metaphors are so overtaxed that they become a laughing stock and die of ridicule. That has been the fate of "exploring every avenue" and of "leaving no stone unturned."

An incidental pitfall to avoid is the use of the word **literally**, which means strict adherence to words' plain and natural meaning, when we actually mean **metaphorically** or **figuratively**—in fact, quite the opposite. We often read such expressions as: "He literally wiped the floor with his opponent" and "She literally raised the roof." These statements are, of course, **not** literal. Correct examples would be: "He

and "She literally crushed the flower to a pulp."

GUIDE TO CARLERS: THE CRAFT INSTRUCTOR

Crafts can be divided into two broad categories: manual crafts and handicrafts, teachers giving training in handicrafts are different from those who give instruction in manual trades, such as carpentry, blacksmithy, metal work, etc. The former are known as Handicraft Instructors, while the latter as Manual Training Instructors or Craft Instructors.

Training in manual crafts will help to meet growing shortages of technical persons in the country and will reduce unemployment of educated young people, in that it will help to divert them from 'white-collar' surplus occupations of a clerical nature to those requiring manual skill. Technical and trade schools are being rapidly increased throughout the country to give instruction to young people in different trades and crafts. At the same time more and more schools imparting general education are also insisting on compulsory training in some crafts. This has led to a shortage of Craft Instructors.

A Craft Instructor's work consists of teaching the practices and hand skills as well as the associated theory of one of the many manual trades, to the students/trainees.

Taking trainees or students of one class at a time and using the tools, implements and materials appropriate to the trade, the normal practices of the craft are taught. The necessary materials are issued to the trainees and the details of the articles to be made are given in the accepted manner, working drawings, written instructions or sketches on the black-board being used in accordance with the general procedure followed in the trade. On suitable occasions, where they will make learning easier, designs or models are made and used and practical demonstrations by the Instructor of the use of the tools and equipment of the craft are a regular feature. The students are continually supervised, helped and guided either collectively or individually in their practical work until their sense of colour combination, forms and shapes, three dimensional visualisation, control of hand, manual dexterity and their ability to read and work to workshop drawings reaches the

The instructor also has to look after stores, equipment, tools, and finished products; arrange decorative and finished products for exhibitions and annual functions, and sometimes organise their sale and marketing. In smaller schools he may also be called upon to impart instruction in drawing and art subjects.

Craft instructors are essentially skilled craftsmen, employed in educational and technical institutions and production centres, to pass on their knowledge to students, trainees, and workmen. The work is often amidst neat surroundings, usually without the rigours of a workshop. Working hours are fixed and there are the advantages of paid holidays and Sundays, leave facilities, etc.

PERSONAL QUALITIES NECESSARY for a Craft Instructor are the combination of those required for a craftsman and a teacher. He should have sound physical health and good eyesight. He should also possess a sense of colour, colour combination, space visualisation and three dimensional perception, nimble fingers and dexterity of hand, keen observation and an artistic bent of mind. To be successful as an instructor he should, in addition, possess infinite patience and cool temperament, a sense of humour and tact in dealing with others. He should also be free from physical defects like poor hearing, speech impediment, and nervousness.

TO QUALIFY persons may either complete training as a trainee, in a technical/trade school or as an apprentice in a workshop, for preparation as a craftsman, and later on acquire practical experience.

CRAFT INSTRUCTORS are usually recruited from amongst those who have had suitable practical experience in the related craft e.g. wood work, metal work, tailoring, weaving, etc. More and more institutions are employing educated craftsmen who have completed their school education upto the Matriculation standard. It is, therefore, desirable that persons should complete their formal school education upto the Matriculation standard. It can be followed by one- to two years' theoretical and practical training in the trade of one's choice in a technical/trade school, run by the State Governments and private bodies. For a few trades like moulders, welders, etc. middle-school leavers are also eligible for employment.

Training can also be obtained in Arts

and Crafts Schools, run by the State Governments and private bodies. The duration of the course, which varies from one craft to another, is between one and three years. The qualifications for admission also vary for different trades, but those who have attained middle to matriculation standard are usually admitted. Some State Governments, such as Bombay, conduct an examination for craft teachers and those passing the examination are awarded a certificate.

Apprenticeship is another common method of learning a trade, though it is not sufficient for an instructor's post as knowledge of teaching is an essential qualification. Apprentices learn the job by practical experience, usually by their own initiative and efforts, under an experienced craftsman in a workshop or establishment.

THE COST OF TRAINING varies between Rs. 5/- and Rs. 15/- per month as tuition fees. Many institutes levy charges for the supply of raw material, the average charges being Rs. 2 to Rs. 10 per month. Most Government institutes, however, charge no tuition or material fees, and in many an institute stipends/scholarships are available to poor and deserving trainees.

FURTHER TRAINING On completion of the basic training in a trade, persons may undergo the Instructor's course of training in the Central (Union Ministry of Labour) Training Institute for Instructors, Koni, Madhya Pradesh. Those who are already in the trade for some time, and have attained proficiency in the trade, are eligible for admission. The duration of the course is 5½ months. The tuition fee charged is Rs. 15/- per month for private candidates and Rs. 10/- for those nominated by an Industrial concern. Nominees of the Central establishments, however, get free training. Women craft instructors are trained at the Industrial Training Institute for Women, New Delhi. In the Second Five-Year Plan another Training Centre for Instructors is being established at Aundh, near Poona.

OPENINGS for craft teachers exist in high/higher secondary, multi-purpose, arts and crafts, and public schools. They are also employed in the technical and trade schools, under the Central and State Governments, local and private bodies, charitable trusts, orphan and widow homes, etc. There is also scope for organising and running private training establishments.

ENTRY INTO THE PROFESSION is by personal contact with prospective employers and also through Employment Exchanges. Many posts, specially those under private employers, are advertised in the newspapers and appointments are made by selection from amongst those applying in response to these advertisements.

PROSPECTS FOR ADVANCEMENT are to the posts of supervisor and foreman, where these exist, on seniority-cum-merit basis. Those completing the instructor's course from the Central Training Institute for Instructors stand chances of quick promotion to these posts.

EMPLOYMENT OUTLOOK: The country is fast developing a programme of production and industrialisation. This programme also includes development of crafts and handicrafts. In order that competent youngmen may be diverted into this new field, opening up great possibilities of employment, our students will increasingly be trained to acquire healthy work habits. Training of students in crafts is expected to bring about a more realistic outlook and

inculcate in them a desirable respect for manual work. Accordingly, it was decided to introduce craft training in about 8,000 middle schools, as well as in the High and Higher Secondary Schools, during the Second Plan period.

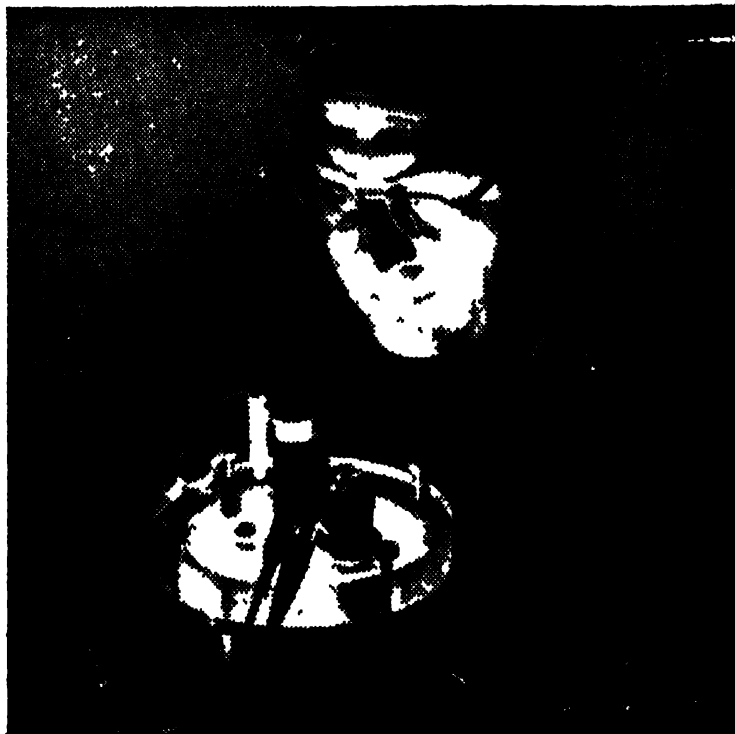
There is a great demand for able craft instructors, and with the introduction of craft training in schools, and also because of the expansion of the craftsmen's training programme, there is a likelihood of employment of nearly 20,000 craft teachers during the next few years.

FOR FURTHER INFORMATION contacts may be made with—

- (i) The Director of Industries, Technical Education, or Engineering Education of your State.
 - (ii) The Principal of an Arts and Crafts School.
 - (iii) The Principal of a Trade/Technical Institute.
 - (iv) The Employment Exchange serving your area.
- (Courtesy: 'Union Ministry of L. & E.')

New Meter Length Standard

An eerie glow envelops a scientist at the National Bureau of Standards in Washington as he adjusts a krypton 86 lamp in its bath of liquid nitrogen. The wavelength of the orange-red light coming from the lamp was adopted as the new international standard of length at the General Conference on Weights and Measures in Paris in October 1960. It replaces the platinum-iridium meter bar which had been the international standard since 1889. The new definition of the meter is 1,650,763.73 wavelengths of the krypton-86 light. The lamp is operated at liquid nitrogen temperatures—about 345 degrees Fahrenheit below zero (−209° Centigrade)—to increase the stability of the wavelength. Greater measurement accuracy is of vital importance to modern science, especially in space guidance equipment.



EDUCATIONAL FORUM

NATIONAL UNIVERSITY IN DELHI PROPOSED

The Union Government is considering a proposal to set up a National University in New Delhi during the Third Plan period. This will be the first of the four national universities the Government proposes to set up in the next 10 to 15 years.

Nearly 50 per cent of the total estimated cost of Rs. 15 crores on the proposed university is expected to be met from foreign sources.

The Ford Foundation and the Rockefeller foundation have expressed their willingness to help India in this venture. Financial aid is also expected under the U.S.P.L. 480 scheme.

The Union Education Ministry, who has sponsored the proposal, hopes to set up and develop the proposed university on the model of the Universities of Oxford and Cambridge in the U.K. and Harvard University in the U.S. The university which will be residential will mostly admit post-graduate students in science and arts subjects though a small number of honour's students may also be admitted.

To attract bright students from all over the country a large number of scholarships and research fellowships will be awarded. With a view to maintaining a high standard of education, eminent teachers from abroad and from within the country will be recruited. The salaries of teachers are expected to be higher than those offered in any other Indian university.

With the establishment of the proposed university, the Government hopes to stop exodus of bright students to foreign universities. This university will also turn out competent teachers to man other universities in the country.

Since students from various States of the country and from the neighbouring foreign countries are expected to join the university, the media of instruction will be both Hindi and English.

The establishment of the university will not in any way come in the way of Delhi University. Pending a decision on

the National University, however, a proposal to set up a second university in New Delhi has been shelved for the time being.

Though the site of the proposed university is yet to be selected it is proposed to be located on a large tract of land south of Vinay Nagar, near the Ring Road. This site was earlier earmarked for establishing a second campus in the Capital.

FOUNDRY AND FORGE TRAINING INSTITUTE

Shri Humayun Kabir, Union Minister of Scientific Research and Cultural Affairs, told the Lok Sabha on April 26, 1961 that a detailed scheme for establishing a Foundry and Forge Training Institute was being prepared by an Expert Committee appointed for the purpose.

The Minister said that the Institute would train graduates and diploma holders in engineering in specialised aspects of Foundry and Forge Technology and would award appropriate certificates to successful candidates.

STUDY OF REGIONAL LANGUAGES

The details of the University Grants Commission's scheme for helping the development of regional languages in Universities were given by the Union Education Minister, Dr. Shrimali.

Under the scheme, there would be two prizes for the study of regional languages, one of the value of Rs. 500 and the other of Rs. 250. These would be awarded on the results of a competitive examination to be held each year at each of the Indian Universities. In addition to the cash prizes, the candidates who obtain the first and the second places would be permitted to tour for one month in the area of the language in which they have secured a prize.

AGRICULTURAL UNIVERSITIES NOT FAVOURABLE

The University Grants Commission does not favour the establishment of agricultural universities in the country.

It expressed this view on April 10, 1961, while commenting on a Food and

Agriculture Ministry's proposal for the establishment of agricultural universities at Rajendra Nagar in Andhra Pradesh and Udaipur in Rajasthan.

The Commission's view is that it is not advisable to establish universities dealing with a single discipline. It would not be conducive to research and all round development of the students' personalities. These could be fostered only when several faculties came in contact with one another in a university. A university should have at least three faculties.

The Commission is also against the establishment of affiliating agricultural universities. It is of the opinion that an agricultural institution should be predominantly rural in character and this is not possible with an affiliating university.

The Commission is understood to have said that the best way to promote the study of agriculture is to reinforce the departments of agriculture and the agricultural colleges in universities. More emphasis should also be laid on undergraduate and post-graduate instructions and on research and extension services in this field. These faculties should be developed in co-operation with the State Agriculture Departments and the Union Ministry of Food and Agriculture.

The Commission feels that if agricultural universities are established, several other professional disciplines will also ask for similar universities and will seek affiliation of colleges.

Earlier, the Commission had expressed the view that before setting up new agricultural universities the development of the university set up at Rudrapur with U.S. financial and technical aid should be watched.

The Inter-University Board has already expressed itself against the establishment of agricultural university.

LOK SAHAYAK SENA TRAINING SCHEME

About 16,500 volunteers will be trained every year in the border areas, and 54,000 in other areas, under the Lok Sahayak Sena scheme, which has been slightly modified.

This is stated in the Defence Ministry's report for 1960-61.

The duration of the training camps in

the border areas will be 60 days; in other areas it will be 30 days, as before. Eleven training teams are being formed for the border areas, and 18 for other areas. A minimum of one training team will be allotted to each State.

Every border area team the report adds, will be capable of splitting up into three self-contained sub-units, which can hold an independent camp of about 170 trainees. This might prove expedient in hilly and thinly populated areas, where response is likely to fall short of the normal complement of about 500 trainees for each camp.

Since the inception of the Lok Sahayak Sena in May 1955, nearly 4,70,000 persons have been trained in 1,065 camps, as against the target of 500,000 last year.

PRACTICAL TRAINING IN MINING

Shri Humayun Kabir, Union Minister of Scientific Research and Cultural Affairs stated in the Lok Sabha on April 26, 1961 that the various organisational and financial details of the proposed Directorate of Practical Training which would organise supervise and coordinate the practical training of mining students were being worked out.

The Minister said that pending the establishment of a full-fledged Directorate a Practical Training Unit had been set up at Dhanbad which was arranging for the training of graduates. He denied that students of degree and diploma courses were experiencing considerable hardship in the absence of the Directorate.

The Minister also added that graduate-trainees were being paid a stipend of Rs. 150/- p.m. The question of giving similar stipends to Diploma-holders would be considered after a decision had been taken regarding the scope and duration of their practical training.

OVER 2,61,000 HINDI TERMS EVOLVED

In a written reply to a question in Rajya Sabha on April 27, 1961, the Union Minister of Education, Dr. K. L. Shrivastava, stated that Hindi equivalents of 2,61,324 terms on 27 subjects had been evolved by the Union Ministry of Education up to March 31, 1961.

The Minister also stated that another 29,145 terms evolved by the Ministry had

not been accepted by the Expert Committees due to various reasons

According to Dr Shrimali, the terms in use in the Ministries in the Government of India were technical terms on General Administration common to all Ministries and technical terms pertaining to the subject dealt with by the Ministry concerned

All the Union Ministries concerned with technical terms pertaining to subjects dealt with by them have forwarded to the Union Ministry of Education lists of about 1,33,000 terms to be rendered into Hindi. Out of these terms, 46,386 are pending for evolution with the Central Hindi Directorate, as most of them were received recently

* * *

GUIDANCE PROGRAMMES IN SECONDARY SCHOOLS

"In the context of the changes taking place in the system of education, guidance programmes in the schools had become imperative," said Shri Raja Roy Singh, Joint Educational Adviser to the Government of India, Ministry of Education in New Delhi on May 29, 1961. He was speaking at the valedictory function of the professional training course for the post-graduate diploma in Educational and Vocational Guidance held at the Central Bureau of Educational and Vocational Guidance, Central Institute of Education

Shri Raja Roy Singh added that even though the statistics of guidance showed results which were not impressive, potentially the guidance movement was most vital. Referring to the targets for guidance during the Third Five Year Plan he indicated that the Centre proposed to give financial assistance to the State Government, to strengthen the existing Bureaus of Guidance or to establish new ones

It was also proposed to provide counsellors in 300 Multipurpose schools and career masters in 6000 secondary schools. In addition he was sure that the 1000 or more progressive schools in the country would introduce guidance programmes with their own resources if given some encouragement by the government

* * *

AFFILIATION OF COLLEGES TO UNIVERSITIES

The University Grants Commission has commended the system of affiliation of colleges prevalent in Madras, Delhi and

Andhra for adoption by other universities as it is considered to be more or less satisfactory

This was stated in the Lok Sabha on April 4, 1961, by the Education Minister, Dr K L Shrimali, in reply to a question.

Dr Shrimali said there was no question of infringement of the autonomy of universities as the UGC was not imposing its decision on the universities

* * *

UNAUTHORISED LEVIES IN DELHI SCHOOLS

Dr K L Shrimali, Union Minister of Education, outlined in the Rajya Sabha on April 24 the steps taken by Government to stop the levy of unauthorised payments in some of the schools in Delhi in recent years

Dr Shrimali said that instructions had been issued to all the Government-aided schools in Delhi not to charge any donations on a compulsory basis without the prior approval of the Directorate of Education.

The Minister said the Directorate was keeping a watch on the school managements especially those who were found to be levying unauthorised donations from the students and surprise inspections of their accounts were also conducted by the Auditor of School Accounts

GENERAL KNOWLEDGE TEST

(Continued from page 636)

$$= \frac{18 \times 1120}{224} \text{ gms} = 90 \text{ gms Ans.}$$

(ii) Now according to Faraday's second law of electrolysis,

weight of substance decomposed is proportional to electricity passed

$$w \propto \text{proportional to } zt \text{ or } w = z \cdot zt = z \cdot Q,$$

where z is electrochemical equivalent and c is in Amperes, Q is the quantity of electricity used

$$\text{In our case, } z = 0.00104 \text{ gms/coulomb, } w = 900 \text{ gms}$$

$$Q = w/z = \frac{900}{0.00104}$$

$$= \frac{900 \times 10^7}{104} = 8653846.15 \text{ etc.}$$

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

LOCOMOTIVES WITH "SURI TRANSMISSION"

The first diesel locomotives incorporating the Indian invention known as "Suri transmission," manufactured by M A K of West Germany, arrived in Bombay aboard the SS Indian Trader from Hamburg on April 16, 1961.

Two technicians of the firm of manufacturers, Mr. Peter Dorau and Mr. Heinz Kock, said that they had been deputed to the Northern Railway for six months in connexion with the training of staff and intensive service trial of the locomotive with "Suri transmission" principles in Indian conditions. They said that the locomotive was one of seven such units built by M A K for the Indian Railways under an Agreement with the Government of India. The Present one was fitted with a Maybach diesel engine of 650 h.p. and designed for narrow guage with a speed of 37 m.p.h. The second of the locomotive would be ready to be delivered in ten or 12 weeks.

The "Suri transmission" was invented by Mr. M.M. Suri, Deputy Director (Diesel) in the Indian Railway Research, Design and Standards Organization at Simla.

The new system of diesel locomotive with "Suri transmission", which is a major invention, is said to have several advantages over the conventional type of power transmission. Locomotives fitted with "Suri transmission" will reduce fuel costs.

The manufacturing cost of the "Suri transmission" locomotives is also stated to be much less than that of current types on account of its lighter, simpler and more compact construction. When fully developed, "Suri transmission" is expected to pave the way for the construction of very powerful locomotives of 3,000 h.p. to 9,000 h.p. as compared with the 2,000 h.p. locomotives now in use in Indian and other countries.

The Central Government had granted to M A K a licence for the world exploita-

tion of the invention which is said to hold out possibilities of revolutionizing the manufacture of diesel locomotives the world over.

Mr. Suri's services had been lent to M A K for six months at the request of the manufacturers.

FIRST INDIAN-MADE AIRCRAFT ENGINE

The Defence Minister, Mr. V.K. Krishna Menon, switched on the first Indian-made gas turbine engine at the Maintenance Command Headquarters of the Indian Air Force (IAF) in Kanpur on April 8, 1961.

Engine was designed and developed by the Gas Turbine Research Centre of the Command, and was manufactured in barely 18 months. It has a thrust rating of 2,200 lb, with centrifugal compressor of 4—1 pressure ratio, and is driven by a single-stage turbine.

A unique feature of the engine, which is capable of up to 13,300 revolutions per minute, is that it has a cannular combustion chamber. This is the first time that such a chamber has been incorporated in a centrifugal gas turbine. The engine is so simple in design that every component could be made with conventional machine-tools.

Only four other nations in the world—UK, France, USA and Russia— design and produce such engines, which are ideal for high-speed aircraft.

CHARLEMAGNE PRIZE

The Charlemagne Prize, conferred annually by the City of Aachen, (West Germany) for services to the cause of European unity, was awarded on May 11 to Professor Walter Hallstein, president of the executive commission of the European Economic Community. The prize consists of a silver medal, a certificate, and a sum of 5,000 Deutschmarks (about £450). Previous recipients have included Sir Winston Churchill and Dr. Adenauer.

RAISING OF THE "VASA"

The 17-century Swedish warship *Vasa*, which capsized and sank in a gale on her maiden voyage in August 1628, was successfully raised on April 24, 1961 after having been buried in the mud at the bottom of Stockholm harbour for more than 332 years. Launched during the Thirty Years' War, she was a 64-gun warship with a length of 165 ft. and a beam of 40 feet.

Built to the order of King Gustavus Adolphus, and designed as the flagship of the Swedish Navy, the *Vasa* went down in a squall shortly after starting her maiden voyage from Stockholm on Aug. 10, 1628. She had on board a crew of about 130 and some 300 soldiers, many of whom were accompanied by their families; most were saved but about 50 people were believed to have drowned. Salvage operations were undertaken immediately after the disaster, and also later in the 17th century, but without success, and no further attention was paid to the *Vasa* until 1956, when Hr. Anders Franzen, of the Swedish Navy administration, located her at a depth of 110 ft. Salvage was begun in 1957 and completed successfully in April last as stated above.

Though submerged for more than three centuries, the *Vasa* was found to be in a surprisingly good state of preservation when brought to the surface; after intensive caulking and pumping in dry-dock, she sailed on her own keel on May 3 for the first time since her disastrous maiden voyage in 1628. On complete restoration she was to make a triumphal tour of Stockholm harbour in June, escorted by units of the Royal Swedish Navy, after which she will be preserved in dry-dock at Djurgården (Stockholm) as a maritime museum.

THE WORLD'S OLDEST HOUSE?

A house believed to have been built more than 57,000 years ago has been found near Kalombo Falls in Northern Rhodesia by Mr. J. D. Clarke, curator of the Rhodes-Livingstone Museum, and a team of archaeologists. It is believed to be the world's oldest house.

Another claimant for the title is a house built of mammoth bones some 20,000 years ago near the town of Voronej in the Soviet Union. It will soon be open to visitors.

RAMANUJAM'S PAPERS FOR NATIONAL ARCHIVES

On the occasion of the 41st death anniversary of India's great mathematician the late Shri Srinivasa Ramanujam, the National Archives of India arranged to place on view a few significant documents bearing on his life and work.

The documents displayed at the National Archives from April 28 to May 6, 1961, were from the personal file of Shri Ramanujam, which was transferred to the National Archives of India some years back by the Madras Port Trust. It might be recalled that the great mathematician joined the Office of the Chief Accountant, Madras Port Trust, in 1912 as a clerk. These records include his application for the Clerk's post dated February 9, 1912, and letters in original written about Shri Ramanujam's work by Professors Hill and Hardy.

Born in 1888, Shri Ramanujam was awarded in 1914, in recognition of his exceptional merit, a scholarship by the Madras University for pursuing his studies at the Cambridge University. He spent five years at Cambridge. In February 1918 Shri Ramanujam was elected a Fellow of the Royal Society in recognition of his outstanding contribution to pure mathematics. The same year the Cambridge University elected him a Fellow of the Trinity College. Professor G. H. Hardy, under whose guidance Shri Ramanujam pursued his studies at the Cambridge University, described him as being "in some respects the most remarkable mathematician in the world."

Shri Ramanujam died on April 26, 1920, at the age of 32.

GAGARINITE, A NEW MINERAL

A group of researchers of the Institute of Geology and Mineralogy of the USSR Academy of Sciences discovered a new mineral which they named "Gagarinite," in honour of the first cosmonaut. It will figure under this name in all catalogues and reference books.

According to Erast Severov, one of those who made the discovery, gagarinite is a mineral, more than half of which is composed of rare earth elements. These elements are being widely used in all the latest branches of industry and have great prospects. They are employed in electronic

nics and in hard alloy metallurgy. Thus the main elements of gagarinite will probably be used to a considerable degree in making parts of future space ships.

Gagarinite has been found in a number of deposits in the USSR and the Soviet geologists hope to find new commercial deposits of this valuable mineral. The time is not distant when not only cosmonauts but geologists as well will fly to other planets and see with their own eyes what the Earth was like millions of years ago. The great interest of geologists in studying cosmic bodies was an additional reason for naming this new mineral in honour of the first hero-cosmonaut.

REWARDS FOR MINERAL DEPOSIT FINDS

Government has decided to give rewards to persons giving information leading to the discovery of new mineral deposits of economic importance. A reward of Rs. 500 will be given to persons giving information about tin, copper, lead, nickel and some other metals and coking coal. Persons giving information about precious metals like gold, silver and platinum and precious stones like diamond, will get a reward of Rs. 100. A reward of Rs. 200 will be given to persons giving information about other minerals. The grant of a reward is voluntary and does not involve any legal commitment on Government's part.

CENTENARIANS IN RUSSIA

After a careful check of the claims of some 28,000 Soviet citizens to be more than 100-year-old, the Central Statistical Office of Moscow rejected about 7,000 cases attributing the errors to lapse of memory and senile coquetry.

In support of this, they quoted the 1959 census figures which show that the number of inhabitants who have reached the age of 100 or more works out at 10 per 10,000 compared with 1.5 among American Whites and 0.6 among Britons.

Also, they cast doubt on American statistics, according to which 16 out of 10,000 non-White inhabitants of the U.S. exceed the age of 100 years.

There are several interesting features in the break down of the figures of Soviet centenarians. Four out of five of them live in this country. Three out of four are

women. Six hundred have attained the age of 120 or more, though at this stage, statisticians admit, it becomes difficult to establish their exact ages.

Longevity varies greatly from one region to another in the Soviet Union. Thus in the Moscow region, the index is one centenarian to 100,000 inhabitants, while in the Caucasian mountains it rises to as high as 144 the record being held by a small autonomous region called Nagorno Katabakh.

Caucasians are the "champions of longevity", according to Vestnik Statistiki (statistical bulletin), quoted by Tass, on April 1, 1961.

Of every 10,000 Azerbaijan residents, 84 are centenarians, the bulletin said.

Russia has 21,708 people aged 100 or more, according to the Central Statistical Board on the basis of the 1959 census, Tass added.

Of these 5,432 are men and 16,276 women, and 592 were aged 120 or more.

To avoid mistakes, the ages were all verified from documents, Tass added.

SWEDISH POST OFFICE SUPPLIES PEN FRIENDS

Young people wishing to find a pen friend in Sweden may do so quite simply through the Swedish Post Office. A Post Office employee, Mr. Erik Lindgren, has been officially entrusted with the job of providing Swedish boys and girls with pen friends abroad through the Central Committee for International Exchange between Schools. Youngsters between the ages of 12 and 19 may write to Mr. Erik Lindgren, Box 606, Lund 6, Sweden, giving their name, address, date of birth and main interests, and he will do his best to obtain a suitable correspondent.

Swift gratitude is sweetest; if it delays, all gratitude is empty and unworthy of the name. —Anon

An orator is a man who says what he thinks and feels what he says. —W.I. Bryant

The knowledge of man is as the waters some descending from above, and some springing up from beneath; the one informed by the light of nature, the other inspired by divine revelation. —Bacon

Readers' VIEWS

DOWRY SYSTEM

Sir,

Much of ink and saliva, galle in effect, have been (without any ruth), dissipated over dowry—the most inveterate social canker easily culpable of dooming many a happy family to abysmal perdition, debauching many a gentle soul and wrecking the society to its present morbid condition.

The writer, in unison with other sagacious readers, has every fair reason to forestall that the Anti-dowry bill, for sure, will come a cropper to bring about the desired change. The reasons for this augured failure are not far to seek; for the ravenous dowry seeker will be prompt enough, with their lynx eyes, to spot the Achilles' heel in the bill, namely, the gift clause. This 'gift clause' has been, perhaps, incorporated in the Prohibition bill on deliberation as a monument to the acquiescent flexibility in our constitution. "A pin-head hole can sink the colossal ship".

The trap is no doubt laid but will not enmesh any defaulter forasmuch the backdoor is there to let them go scot free. The backdoor implies that neither of the parties will indulge in the nefarious practice of 'give and take' openly but all these transactions of human souls will be carried out clandestinely leaving the law free enough to modify and remodel itself till it becomes a 'dead law'.

Why the state of affairs has to come to such a sorry pass? The biggest offenders in perpetrating this vile practice are the sections of 'parvenus' in our society. They want to raise their standard of living at the cost of morality. What an ignoble motif! Besides, modern civilization too has been and is abetting offenders. It has perverted man to chase the shadow rather than court the substance. Sophistication and window-dressing compel each family to try to outdo its neighbour in the display of ostentatiousness. The system of dowry has circumscribed itself to the battle of coins and thereby lost its prime motif of cementing the nuptial bond with the exchange of desirable gifts.

It is high time that the brides and the

bridegrooms should ask their parents to refrain from making such vulturous demands and to emphasize the human aspect of marriage—the irrevocable tie which cements two souls.

The cheapest and the most efficacious remedy which will not only poultice the wound but remove it from the core is: boys of rich families should choose their better halves from amongst the girls belonging to poor families. On the other hand, the distaff side too should reciprocate. Girls coming of rich families should condescend themselves to spouse educated lads hailing from poor families. The girls need a bit of boldness in doing so. This will not only chime the death-knell of this formidable monster but also go a long way in restoring the economic imbalance of society.

(Kayel, Shahkot)

PATRIOTISM VS. HUMANITY

Sir,

It is the first and foremost duty of every young man to love his motherland heartily. He will never hesitate to sacrifice his life for the sake of his motherland. He must be free from the fascination of chauvinism. He will never be afraid of death and cruel punishment.

At the end of World War I, Germany was concatenated by the provisions belonging to the Treaty of Versailles. Political, social and what is all the more, economical structure of Germany had been devastated. The Germans could not imagine the principle of "Liberty, Equality and Fraternity". At this critical juncture of Germany, Hitler took an oath to distribute the holy pot of freedom to the Germans. He was trying with might and main so as to make the economic and social structure of Germany strong enough. But the jews wanted to establish their own supremacy in the social intercourse of Germany. That is why Hitler influenced Eichmann, Muller and Hedrick to root out the branches of the Jews in Europe.

Eichmann's name as a culprit or a demon of the World has been spread throughout the length and breadth of the

world, and true it is that a large number of the Jews were mercilessly assassinated by him during World War II. Now Eichmann has had to face an eerie atmosphere—the atmosphere which has, it is true beyond dispute, been created by the inhabitants of Israel. Sri Gidyon Husner (Attorney General of Israel) has said that Eichmann will be cruelly punished because he, after butchering the Jews, has neglected humanity.

But one thing to be remembered is that Eichmann is a true Patriot of Germany. He knew that he would be cruelly punished for killing a large number of the Jews. But is Eichmann afraid of being punished? Eichmann knows no bending of his head in any formidable circumstance.

Unquestionably true the Jews are ripping up an old sore. They are hankering after real punishment of Nazi-Eichmann. They have, it is true, worn a dress of virginity, innocence and purity. They are boastful and proud—proud of their sanctified place—Jerusalem. But do the Jews forget the memorable Revolution of 1948 in which a large number of the Arabs were cruelly butchered by them? Have the Jews not neglected the mankind after killing the Arabs cruelly? True to the fact that Gidyon Husner's judging power is circumscribed to a limited sphere. He can find the presumptuousness and atrociousness of others but not of his own.

The Jews will spend a happy life—will enjoy an unqualified happiness only when they will see that Eichmann is going to the jaws of death. But the Jews have become aware of the fact that the situation in which Eichmann had been placed of extirpating the seeds of the Jews was a situation, intended for bloody-struggle of war.

War itself is heinous. It is a ghastly dance of death for many a imperial life is made away with in war. It has an enigma which draws each and every man towards itself. That is why a man however, rationalist, honest or moralist may be, during war time, he cannot prevent himself from killing men cruelly.

Perhaps at the end of judgement, Eichmann will be sentenced to death. Eichmann's spirit may evaporate from the Law-Court of Israel, but his self-abnegation and laudable spirit will be remembered by each

and every man of Germany. And that is enough for a true patriot.

Lastly, if the Jews are the true sons of Jekovah and if they have any noble attitude towards humanity, they will not take revenge by bestowing cruel punishment (e.g. death) to Eichmann.

(P. K. Santra, Midnapore)

* * *

THE GANDHIAN WAY OF LIFE

Sir,

It is an accepted fact that Gandhijee was not a Philosopher or an academic thinker. He did not spin out his Philosophy of life in seclusion or apart from the hubbub of daily life. He is not an originator of new ideas or any new system. He never cared to present his ideas in a systematic and orderly manner or subject them to rational proof. He sought to justify them when opposed. He was a true man of action, a **Karmyogi**. For him the service of the poor was the service of the God.

All his ideas, regarding Politics and Economics, took shape and developed in the course of the campaigns launched by him in India or abroad.

The campaigns were never launched with any pre-formed theory, actions came first and principles were developed afterwards.

Thus what we call Gandhism is not a school of thought as compared to Marxism or Leninism. Gandhijee never put forth his thoughts and ideas in any manifesto, but certain fundamental principles bind them into a unity of all he thought and did. If we accept that there is no such thing as Gandhism, there is certainly what can be called, "The Gandhian way of Life". This way of life is purely dedicated to the pursuit of truth and non-violence.

As a way of life Gandhism possesses all the characteristics essential for an "ism". It has a precise and clear cut philosophy of life, certain basic principles on which a particular ideology and a particular technique of solving problems of national or international character have been built up.

The various movements and organisations which Gandhijee led or organized possessed a deep underlying and fundamental unity and consistency.

Gandhi was the firm believer of truth, love and non-violence. He preached and practised them throughout his life and

never deviated from them even to the slightest degree.

The principles, ideology and the technique of actions based on them are capable of being stated in a systematic way and communicated to others. It does possess the ingredients which can save the humanity from destruction.

(Mrs. Kulwant Ratan, Delhi)

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ON SEX-EDUCATION

Sir,

The subject of sex is not something light or of little importance; it is a remarkable one and therefore its study is as much essential as that of any other subject. It is extraordinarily surprising that though sex concerns us so much--both directly and indirectly, and, sooner or later it occupies the thought of all, yet we keep silent about it and do not think of imparting sex-education. We treat sex with great secrecy and awe.

At present, the knowledge of sex is left to be picked up anyhow, with the result that the ignorant are misled into abusive practices thereby ruining themselves ultimately.

We feel that lack of sex-education is at the root of all our problems and ills--social, educational, spiritual and so on and so forth. Sex-instructions should be imparted dispassionately to young people who are ignorant of or know little or nothing about the demon of sex. This subject should be taught to all and sundry just like geography, arithmetic or any other subject. Necessary line, may of course, be drawn here and there.

It is hoped that the suggestions about sex-education will not be disposed of as something absurd or utopian, for even a person of no less great personality than Mahatma Gandhi was in favour of it. And not only in favour, but he also did something practical in his personal capacity in this respect. He himself imparted sex-instructions to young children of both sexes for whose training he was responsible.

(Rajendra Prasad Goswami, New Delhi)

* * *

GREAT LITERATURE

Sir,

Great literature aims at the ennoblement of nature, enrichment of mind and healthy amusement. A literature that fails to fulfil these requisites cannot face the

vicissitudes of time. It will wither away like a flower.

When we read great classics, our passions are purged and our nature is refined. It becomes more aesthetic. In a nutshell we can say that it elevates us to the "upper plane of humanity".

Literature holds up the mirror to life and its secrets. It exposes human heart and mind before our eyes. It is the cream of the experiences of writers. The best part of a writer's literature is based upon his own experiences. Masterpieces directly or indirectly reflect the most important periods of writers' lives. Thus literature enriches our minds.

It is to be admitted that literature is the most refined and most valuable means of amusement. There are so many persons who read it only for the sake of amusement. When a book does not amuse us, we often keep it aside after reading a few pages. We do not read literary books for gleaming facts. A literary book must provide us with healthy amusement. If it fails to prove, it cannot occupy a high place in the world of letters.

(Hamid Ul Hassan, Jhansi)

* * *

AN INDISPENSABLE ASSET

Sir,

I have been a regular reader of this journal and never miss to read it from a to z. The journal is veritably a mine of most uptodate information, an indispensable asset to every educated person.

Really speaking it is the most authentic and comprehensive compendium of the world's current affairs. It gives us a time-picture of the world events up to date.

Each topic is exhaustive, well-planned and bears the hall-mark of scholarship and deep study. The expression is lucid and limpid and arguments convincing. The ideas, comments and reflections are illuminating and thought-provoking. The simplicity of the language, the clarity in thoughts, perfection in every item and the vivid presentation are the main virtues of the journal.

I offer my heartiest thanks for your munificence.

(M. V. Kaul, Dewas)

A UNIQUE MAGAZINE

Sir,

I am immensely grateful to you for
(Continued on page 656)

FILM WORLD

NO COLOUR PROCESSING ABROAD

It will no longer be possible to send an Indian film abroad for colour processing, according to a Notification of the Ministry of Commerce and Industry.

In the recent past, in exceptional cases alone, licences on an ad hoc basis were issued for colour processing abroad on condition that the licence holder would earn foreign exchange equal to 125 per cent value of the imported prints by exhibition abroad of the colour processed film.

According to the new Notification of the Ministry, the issue of ad hoc licences is being discontinued, the only exceptional applications that will be considered being those recommended by the Central Advisory Committee on Raw Films.

* * *

JAPAN—GREATEST PRODUCER OF FILMS

The greatest number of feature films produced in 1959 was by Japan (572), followed by India (320), the United States (288) and Hong Kong (246), according to a U.N. statistical report. The report is contained in the U.N. Industrial Year-Book.

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MORE AWARDS FOR "DO ANKHEN"

Rajkamal's and V. Shantaram's multiple award-winning film "Do Ankhen Barah Haath" continues to add to its laurels.

The picture (titled in English as "Two Eyes and Twelve Hands") is reported to have bagged five awards at the recent Boston Film Festival in U.S.A.

The awards are in respect of story, acting, music, outdoors and sound.

Of all the ten Shantaram films under the Rajkamal banner that have won for its maker several national and international awards, "Do Ankhen Barah Haath" thus takes the pride of place for having secured the maximum number.

* * *

FILM ON NEWSPAPER PRODUCTION

Most people are fascinated by the production of a great daily newspaper. They see romance in the gathering of news, with-

out perhaps realising all the mechanical aids necessary before the paper reaches their breakfast tables.

One of Britain's national newspapers, "The Guardian" of Manchester and London, has now produced a 20-minute film, "News Story," which catches all the excitement and hard work which go into the production of a newspaper.

Roughly 24 hours are covered, from early morning when the cleaners are in the office to the next morning when the papers are being delivered. In between one gets glimpses of some of the famous contributors to "The Guardian," sees the news editor at work, watches the reporters gathering news, the sub-editors working on it, the transmission of news and features from London to Manchester, the editor's conference and the make-up of the paper and its technical preparation until the great presses are rolling and parcels are tied up and on their way to the railway station for transmission to all parts of Britain and overseas.

* * *

UNESCO ON FILMS

A survey published by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) said there was widespread agreement among authorities in 30 countries that "something should be done to reduce possible harmful effects of certain films upon the young".

But the 106-page survey said there was less agreement on any substantial solutions.

One conclusion by the 400 experts consulted was that "it was virtually impossible to establish that the cinema had a direct influence on juvenile delinquency.

There is "some evidence that in the case of racial attitudes or prejudices, there can be influenced—in one direction or the other—by a few striking films only", the survey added.

* * *

INTERNATIONAL FILM FESTIVAL IN INDIA

The International Film Festival of India 1961, will be held in four centres,

New Delhi, Calcutta, Madras and Bombay on various dates during the period between October 27 and November 17.

The object of the Festival is to "provide a forum for participating countries to present films of artistic and cultural value and high technical standards and contribute to the development of motion picture art."

The Festival, organised by the International Film Festival Directorate of the Union Ministry of Information and Broadcasting, with the co-operation of the Film Federation of India, is "non-competitive" but souvenirs will be presented in respect of films accepted for participation in the Festival through the official delegations.

In New Delhi, the festival will be held between October 27 and November 2; in Calcutta, between November 1 and November 7; in Madras, between November 6 and 12 and in Bombay between November 11 and November 17.

According to the published set of rules relating to the Festival, two categories of films will be entertained, feature and short films, including documentary, informational, educational and scientific, cartoon films and puppet films.

The entries must be films produced or released on or after January 1, 1960. Each country can send two films each in the two categories. Films in languages other than English or Hindi must have sub-titles in these languages.

The entries should not have been screened in India prior to the festival but there is no ban on films screened at other film festivals.

Each participating country was expected to notify the Festival Directorate by May 15. Entries should be made by July 1. A print of each accepted film with two copies of synopsis in English or Hindi should be sent to the Directorate by August 1.

Two delegates from each country—one of them should be a prominent artiste—will be the guests of the Festival Directorate.

PRIZE FOR DECENCY

The Rank Organisation of London for the second time in three years has been awarded the Mexican Legion of Decency's prize for not distributing any films contrary to Catholic moral code.

The next of the diploma reads:

"The Mexican Legion of Decency desir-

ing the true cultural progress of the cinema and of all spectacles in our country, award the Prize of Decency 1960 to the Rank Organisation of Mexico for being the foreign producing company that presented no films in Category C."

"SPARTACUS" WINS BELGIAN HONOUR

Universal - International's "Spartacus" has been awarded the Grand Prix Exceptionnel, with the designation of "above all competition," by the Femina Beige du Cinema, Belgium's leading women's organisation. Only one other film, in the long history of the organisation's annual awards, has been similarly singled out.

A jury of sixty of Belgium's most influential women, headed by Princess Paola, sister-in-law of the King, made the unanimous selection.

"GARY COOPER AWARD" CREATED

The jury at the Cannes Film Festival this year created a new "Gary Cooper Award" and presented it to "A Raisin in the Sun," a Columbia release starring the Negro actor, Sidney Poitier.

It is recalled that, while the Cannes Grand Prix was not awarded to any film, the best actor award went to Anthony Perkins and best actress award to Sophia Loren.

NO GRAND PRIX AWARDED AT CANNES

A special prize of the Cannes Film Festival jury was awarded to the Polish film, "Mother Jeanne of the Angels," by Jerry Kawalerowicz.

The Spanish film, "Viridiana," was also awarded a special prize.

The prize for the best direction was awarded to Madame Yulia Solntzeva, who directed the Soviet film, "Turbulent Years," written by her late husband, Alexander Dovshonko.

Sophia Loren was chosen the best actress for her work in the Italian film, "La Ciociara."

Best actor award went to Anthony Perkins for his role in "Aimez Vous Brahms."

The Japanese film, "Otohto" ("Tender, Mad Adolescence"), received a special mention from the Technical Commission

for the originality of its setting and the quality of its colour.

The Commission decided not to award the Grand Prix for technique this year, but gave three other "honourable mentions." These were to the Soviet film, "Story of the Years of Fire," for its camera work, the Spanish short subject, "Fire in Castile," for its lighting effects, and the German short subject, "Folkwangs Schulen," for its photography.

The Vatican newspaper, "Osservatore Romano," criticised the Cannes Festival for awarding prizes to two "blasphemous" films—the Polish "Mother Jeane of the Angels" and the Spanish "Virdiana."

The director of the Vatican daily, Raimondo Manzini, wrote: "A little impious feast of blasphemous representations in the work of the two films has been added to the usual ambiguous exhibitions of sex."

* * *

36 INDIAN FILMS BANNED ABROAD

Thirty-six Indian films were banned by foreign countries during 1960-61. This was disclosed in the Lok Sabha by the Prime Minister, in a written reply to a question, on April 14, 1961.

A statement laid before the House by the Prime Minister showed that Ghana had banned the maximum number—14—and had given no reasons.

Indonesia prohibited the exhibition of four films without disclosing reasons but it was generally understood that the objection was to depiction of acts of violence and obscenity. One film "Dr. Z" was banned both in Ghana and Indonesia.

Malaya and Singapore banned four including "Pardesi" which the local authorities regarded as a Russian propaganda film.

Afghanistan objected to four films without disclosing reasons. Possibly the themes of the films did not suit the sentiment and religious susceptibility of the people of Afghanistan or the social structure of that country.

Turkey banned only one film "Mother India" on a variety of grounds. The Turkish authorities said that it went against their cultural and national feelings, that it was old and tiresome for the eye, that it had no Turkish explanation and was not in Turkish and that it had contravened many articles of their film regulations.

* * *

INDIAN FILMS IN PAKISTAN

Scores of Indian films, many of them

produced in 1950 and 1951, are currently being screened in West Pakistan. Most of these "ancient" films are a roaring success.

These films were put in cold storage in 1958 when the Government, under pressure from local producers, banned the screening of 381 films illegally imported from India before August 1956. All but 20 have now been released.

Up to 1955, there was no legal provision for the import of Indian films into Pakistan. But distributors found it a profitable business to circumvent the restrictions. It is estimated that over 400 films have been imported despite the blanket ban.

Importers bought Indian pictures at Rs. 20,000 to Rs. 50,000 each and paid a penalty of one rupee per foot. The customs authorities would then "auction" the films to the same importers. The returns of films thus imported illegally are said to have averaged Rs. 500,000.

In 1955 the first Indo-Pakistan agreement was signed regarding the import of films. This was replaced by another agreement in 1957 permitting the import of 10 Urdu and seven Bengali films. The agreement now in force was signed in January 1960.

There are nearly 500 cinema houses in West Pakistan and over 80 per cent, of them screen Urdu and Hindi films. Many of these theatres faced closure following the ban on screening illegally imported films. Their demand could not be met by about the 30 films produced locally.

Distributors who had been adversely affected by the 1958 order have suddenly come into fortunes. The resale value of the old prints has risen five-fold.

Meanwhile, it is likely that in future films from India may be imported on Government account through the Films Development Corporation and auctioned. The Pakistan Government would thus make a profit of over Rs. 50 lakhs annually.

* * *

MOSCOW FILM FESTIVAL

Forty-four countries, as well as United Nations and UNESCO, expressed willingness to take part in the Second International Film Festival to be held in Moscow from July 9 to July 23. They include Austria, Australia, Argentina, Hungary, India, China, Britain, Italy, Canada, the United States, Cuba, France and Japan.

Asian and African countries are prominent among the participants in the festival.

Cinema organizations and leading representatives of the film art in different countries are taking lively interest in the forthcoming festival.

* * *

JOINT INDO-UZBEK FILM VENTURE

Uzbek and Indian film makers decided to make jointly a motion picture 'A Book of Two Hearts' about historic contracts between the peoples of India and Central Asia.

The screen play written by Soviet authors Sharaf Rashidov and Vitkovich and Indian poet Sardar Jafari is based on the poem 'Komde and Modan' by Mirza Abdulkader Bedil, a Tajik author who lived in Delhi in the 17th century. The poem calls for international friendship and protests against wars.

The directors Rono Mukarji of India and Kamil Yarmatov of the USSR together with playwrights are now preparing the script, choosing the cast from among Indian and Uzbek film actors.

* * *

CONTEST FOR YOUNG FILM-MAKERS

A national film contest for youth is to be organized annually in Britain by the British Film Institute under the sponsorship of the National Union of Teachers. A number of British schools are now teaching their pupils to make films to achieve a better understanding of the cinema and television. Winning films will be screened at the National Film Theatre.

* * *

FILM AND TELEVISION CALENDAR FOR 1961

The 1961 "Calendar of International Film and Television Events", published by the International Film and Television Council lists, in addition to meetings of member organizations of I.F.T.C., festivals, congresses, specialized meetings and exhibitions for the current year and announces events which are being prepared for 1962 and 1963. All inquiries should be addressed to: The Secretariat, I.F.T.C., 26, avenue de Segur, Paris, 7e.

* * *

CARDINALS CONDEMN "IMMORAL" FILMS

Eight Italian cardinals and 13 archbishops and bishops have attacked the Ita-

lian film industry for producing "too many immoral films."

The Italian Episcopal Conference hit out at the "immorality of a large segment of Italy's film production."

In Washington, cinema owners, concerned about complaints of too much sex and violence of films, have announced a plan to send synopses of films to cinema owners so that they could inform their patrons of the contents of the films.

READERS' VIEWS

(Continued from page 652)

publishing a unique magazine like "Careers and Courses" which gives the first hand information and contains articles on various subjects. I have been a regular reader of this magazine for the last ten months and within this short span of time, I have been immensely benefited by this.

Undoubtedly, this is an indispensable magazine for the youths of today. I extend my hearty congratulations to you and your beautiful magazine, 'Careers And Courses'.

(B.L. Sharma, New Delhi)

* * *

CORRIGENDUM

Sir,

I have the honour to inform you that a mistake has crept in on page 537 of the June 61 issue of your magazine. Item No 8(iii) which is nearer the earth: the sun or moon? Ans. is Sun. I think the answer is not correct. The moon is nearer the earth instead of sun. Please confirm.

Yours faithfully,

(Ashim Roy, Lucknow)

(Yes, you are correct, moon is nearer the earth and not the sun. The mistake is regretted.—Ed. C. & C.)

* * *

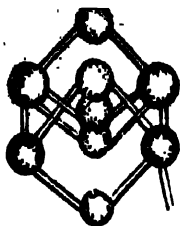
Sir,

You have provided a wrong information in the May issue, on page 474, under the main heading "Home Affairs". You have shown that the Presidents' rule in Panjab was in force from June 20, 1951 to April, 1962, under the sub-heading 'President's Rule Imposed in Orissa'. Hence mistake is regarding the year 1962. This should be corrected.

Yours faithfully,

(Raghubir Saran Goyal, Beawar)

(It is not 1962, but 1952. It is a proof reading mistake and we regret it.—Ed. C. & C.)



SCIENCE & INVENTION

ELEMENT 103

The U.S. Atomic Energy Authority announced on April 14, 1961 that a new chemical element—Element 103 on the atomic scale—had been created in the Lawrence Radiation Laboratory of the University of California at Berkeley, after nearly three years' research.

Element 103 was the first to be discovered solely by nuclear methods, no chemical techniques being used in its identification. It was produced by bombarding a target consisting of three millionths of a gramme of californium (Element 98) with nuclei of boron atoms having energies of about 70,000,000 electron-volts, the bombardment being carried out by a heavy ion linear accelerator. The new element has a half-life of only eight seconds (i.e. half of the element decays into another element within that period) and is believed to have an atomic weight of 257—the total number of protons and neutrons in the nucleus. Because of its very short half-life, it was suggested that Element 103 is a "dinosaur" element which was formed at the birth of the universe but decayed out of existence in a few weeks.

Element 103 is the eleventh of the man-made synthetic elements which have been produced in the past twenty years in the laboratory by the cyclotron or "atom-smasher"—i.e. those beyond the natural element uranium (Element 92); in nearly all cases they have been produced by adding further nuclear particles to the nuclei of uranium atoms, the most massive found in nature. The other artificial "trans-uranic" elements are neptunium (93), plutonium (94), americium (95), curium (96), berkelium (97), californium (98), einsteinium (99), fermium (100), mendelevium (101), and nobellium (102). Except for last-named, which was discovered in 1957 at the Nobel Institute in Stockholm, all were discovered in the United States—many of them at the University of California.

All the trans-uranic elements have short half-lives (measurable in terms of days, minutes, or seconds) except pluto-

nium, which has a half-life of 25,000 years. The latter element is one of the basic ingredients of the atomic or hydrogen bomb and may also serve as a major source of atomic power.

The discovery of Element 103 was carried out by a four-man team consisting of Drs. Albert Ghiorso, Torbjorn Sikkeland, Almon E. Larsli, and Robert M. Latimer. They suggested that the new element should be named lawrencium in honour of the late Dr. Ernest Lawrence inventor of the cyclotron and founder of the laboratory bearing his name.

The discovery of Element 103 shows a promise of direct practical application, but will broaden man's fundamental understanding of matter and its properties.

U.S. officials said in Washington, on April 20, the discovery by two German scientists in 1938 in regard to splitting uranium and the recent discovery of a new element in this country are two different things.

They said the German scientists split uranium into two lighter elements below uranium, in the list of 92 elements.

They explained that Element 103 is another of the man-made transuranic elements heavier than uranium in the table of elements.

The heavier of these man-made elements exist for a very short time before changing by radioactive decay into lighter ones.

SUN-SPOTS CREATE CHAOS IN RADIO-COMMUNICATIONS

Many specialists believe that unless radical steps are taken there will soon be near chaos in world-wide communications because of shrinking sun-spots.

A particularly emphatic note of alarm was sounded recently by two men responsible for keeping the Voice of America as loud and clear as possible to the ears of the world. They predicted that, by the middle of next year, or soon thereafter, the span of high frequencies available for long-range radio communications would be less than half of what it has been in recent years.

Some believe the upper air will not even approach its recent radio-reflecting properties until after the year 2000. Meanwhile, the pressure on the frequency spectrum is growing at an accelerating pace.

In 1953 the International Telecommunications Union received 10,100 notices of frequency bands. In 1959 the number was 20,208. New applications are pouring in from Africa and other rapidly developing areas.

This pressure was eased from 1957 through 1960 by the record-breaking number of sun-spots. In March 1958 the sun was more speckled than at any time since systematic observations began in 1849.

The number of spots is a gauge of the number of solar eruptions, known as flares. It is also an indication of the sun's emission of ultra-violet light.

The flares often produce bursts of X-rays and protons, as well as gas clouds that produce magnetic storms, upsetting communications for brief periods. However, the intensified ultra-violet light during the maximum of the eleven-year sun-spot cycle greatly increases ionization of the upper air.

When the sun is placid, ionization falls off and only the lower frequencies can be used.

This analysis was presented to the convention of the Institute of Radio Engineers in New York by two specialists of the Broadcasting Service of the United States Information Agency. They were Mr. George Jacobs, chief of the frequency division, and Mr. Edgar T. Martin, engineering manager.

They recommended a three-fold approach to the crisis. One would be a more rapid development of satellites to relay or reflect radio signals. Some of the proposed satellite systems, they noted, could handle a traffic load hundreds of times heavier than that now carried by the entire high-frequency spectrum.

Another method would be to lay more multi-channel cables across the oceans. This would include more cables spanning the Atlantic, an extension of the California-Hawaii cable to East Asia, new cables to Latin America and a link between the American systems and the world-encircling British Commonwealth system now being laid.

Finally, the two specialists proposed

extended tower-to-tower systems such as the microwave circuits that now carry much long-distance telephone traffic in the United States. These use directional beams similar to those of radar. By island hopping, such systems may be extended across the oceans, the two men said.

Although sun-spot maxima are expected in about 1970, 1981 and 1992, some analysts believe that none will compare in intensity with the peak of 1958-59.

* * *

MYSTERIES OF THE LIVING CELL UNRAVELLED

Scientists at the Oak Ridge National Laboratory in Tennessee have reported a major scientific advance in unravelling the complex biochemical and genetic processes going on in all living cells.

Through the use of radio-activity, they have been able for the first time to observe in a test tube the genetic process by which proteins are synthesised. Protein synthesis—a central problem of modern biological research—is the process by which living cells convert food into energy and into new cell materials.

The research, which gives a new insight into living processes, was described by Dr. G. David Novelli, principal biochemist at the Oak Ridge Laboratory, on April 5, 1961, in testimony before the Joint Congressional Atomic Energy Sub-Committee on Research. It caused an outburst of excitement among scientists.

Dr. Novelli predicted that the research should "open up whole new frontiers" in the exploration of the genetic process. It should now be possible, he said, to test in the laboratory many genetic theories, isolate the gene, determine how big it is, determine the role played by individual substances in genetic materials and unravel the genetic code by which hereditary information is passed on to newly-formed cells.

Through the research techniques developed by Dr. Novelli, scientists will have a way of dissecting and studying each step in the genetic process of protein synthesis. In the past, scientists have been restricted to observing the over-all genetic process and developing their theories and conclusions on a statistical-empirical basis.

Proteins, or enzymes, are large molecules built up of 20 building blocks called amino acids, and they act as the chemical machines that catalyse all the mar-

processes occurring in living cells. The information on how the amino acids are arranged to form individual enzymes is contained in the genetic material of the cell.

For years, scientists have been attempting to learn something about the mechanism by which cells synthesise proteins. Among the basic questions remaining unanswered are: How does the information contained in the gene get to the place where the enzyme or protein is made? How are the amino acids arranged in the final structure? What control mechanism does a cell utilise to regulate the rate at which a given protein is made?

Dr. Novelli came upon his discovery through experiments with the efforts of ultra-violet radiation upon proteins. It was discovered that the irradiation inhibited the synthesis of a common enzyme known as galactosidase, which breaks down the sugar in milk. Further experimentation disclosed that the inhibition could be overcome by exposing the enzyme cells to white light.

An examination of the internal contents of the cells disclosed the presence of a hitherto unsuspected fraction of the enzyme. This fraction was then used as a cell-free extract for genetic reduplication and protein synthesis.

Through the addition of desoxynucleic acid—the genetic material of a cell—to the extract, new proteins were synthesised. Thus, Dr. Novelli said, a process was discovered for starting and stopping the process of protein synthesis and following it step by step.

* * *

BALLOON USED IN AN OPERATION

A young mother was saved from death following the birth of her sixth child by the insertion of a small balloon in her body.

Providence Hospital at Seattle (Washington) said on May 27 that the emergency procedure was used when Mrs. William Chesier, 29, began bleeding profusely after the birth of a son, and blood pressure could not be detected.

A tube, tipped with a deflated balloon, was inserted in an artery and pushed into the abdominal aorta. There the balloon was inflated and it blocked the flow of blood to the pelvic region allowing surgeons time to correct the cause of the haemorrhage and to obtain blood for transfusion.

Mrs. Chesier responded five minutes after the balloon was inflated, doctors said, and went home fully recovered. The balloon technique had been previously used on animals.

* * *

CRAFT THAT FLIES UNDER WATER

A craft which "flies" under water and is intended for use in sea-bed observation has been invented, built and patented by a professional frogman—driver in South Australia.

Called a "Towvane", the craft is perhaps the first of its kind in the world.

Weighing about 1400 lb., the six foot long "Towvane" is fitted with fore and aft hydroplanes which enables it to be submerged and held at desired underwater depths as it is towed behind a launch on a wire.

The operator controls the craft from enclosed cockpit which is watertight. His air supply comes from an air cylinder which provides a four hours supply.

Portholes made of one-inch thick perspex at the front and sides allow the driver a close-up view underwater as he travels above the seabed.

The average speed maintained is about four knots although this can be reduced to one knot or increased to up to 20 knots in good control.

The "Towvane" can remain submerged at depths down to 150 feet at normal air pressure. Dives down to 200 feet can be made for short periods. Lights can be attached to the Towvane for night work or when the craft is in deep water.

A telephone link between the Towvane and launch keeps both craft in continuous contact. The craft is buoyant and surfaces automatically when not being towed. The cockpit can be opened from both inside and outside.

BAND OF PARTICLES ENCIRCLES EARTH

The earth is completely enveloped by a three-mile thick band of minute particles, the U.S. Defence Department said in Washington on April 16, 1961.

The band of particles encircles the earth at a height of 11 miles.

The band was discovered by the Scientific Research Laboratories of the U.S.

Air Force, which studied particles gathered by the soundings of spherical balloons.

EARTH HAS TWO MORE SATELLITES

A Polish astronomer claimed on May 13, 1961 that the earth has at least two other satellites besides the moon.

The Cracaw University astronomer, Dean K. Kordylewski, said he had found two satellite clouds composed of interstellar dust and possibly meteorites following the same orbit around the earth as the moon.

They were about 2,50,000 miles from the earth and emitted a faint light, he said. But they could be seen only after the moon has set—and in particularly clear atmospheric conditions.

NEW TYPE OF ALARM CLOCK

An American manufacturer is producing a new type of alarm clock that flashes beam of light on the sleeper's face at short intervals. If that fails to wake him—the manufacturer claims that failure is there—an ordinary alarm clock bell starts ringing after five minutes.

Costing about Rs. 55, the clock has the advantage that it can be so placed to wake one person without disturbing other people in the same room.

DRUG REVIVES FAILING MEMORY

A three-year long series of tests by two Canadian doctors gives new hope for elderly persons who suffer from failing memory.

Dr. Even Cameron, of Montreal's McGill University, and Dr. Leslie Solyom of the city's Royal Victoria Hospital, say failing memory can be rejuvenated by administering ribonucleic acid (RNA). In their tests it produced improved memory in more than half of 84 patients.

Besides memory improvement the doctors also recorded increased alertness, interest, initiative and confidence.

"Patients who improved began to remember names and how to find their way back to their rooms, and were able to knit and to count stitches while knitting.

"It is clear that the earliest possible evidence of memory failure should be detected and that RNA exerts its most favourable effect when introduced in large doses early in the process."

The drug, said the doctors, stimulated tissue and there was a continuous process of renewal in the neuron—the complete nerve cell.

Under its influence the patients' general condition also improved, they noted.

SPACE BALLOON ON RECORD FLIGHT

University of Melbourne balloon carrying photographic plates to record the power of cosmic rays made the world's longest research balloon flight, Prof. V.D. Hooper, head of the Physics department, said on April 1, 1961.

The balloon travelled more than 550 miles to Yorke peninsula. It maintained a height of 80,000 ft. and reached a maximum of 100,000 ft.

FORTHCOMING EXAMINATION

Clerks' Grade Examination, 1961

The Union Public Service Commission will hold an examination at various places commencing on 30th December, 1961, for recruitment to temporary vacancies in Grade II (Lower Division Clerks' Grade) of Central Secretariat Clerical Service, Grade II of Railway Board Secretariat Clerical Service, Grade VI of Indian Foreign Service (B), and in Posts of Lower Division Clerk in the Attached Offices (or any other office) of the Government of India not participating in the Central Secretariat Clerical Service Scheme.

Age Limits: Candidates must have been born not earlier than 2nd January, 1939, and not later than 1st January, 1944.

Qualifications: Matriculation or equivalent.

Application forms and full particulars obtainable from Secretary, Union Public Service Commission, Dholpur House, D.H.Q. P.O., New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. A candidate must clearly state on money order coupon "Clerks' Grade Examination, 1961" and also give his name and full postal address in block letters. Postal orders or cheques or currency notes will not be accepted in lieu of money orders. Completed applications must reach the Union Public Service Commission by 7th Aug. 1961 (21st August, 1961 for candidates abroad).



Mr. ANTHONY DE MELLO

Mr. Anthony Stanislaus deMello, the man who put India on the world sports map, died in New Delhi on May 24, 1961.

The life of Anthony deMello was a life dedicated to sports organisation in India. The man, who for thirty years was one of the key figures in Indian sport, had such a long list of "firsts" to his credit that he may be truly called a pioneer.

Notable among the "firsts" to record only a few, were his founding of the two premier cricket organisations in the country, the Board of Control for Cricket in India and the Cricket Club of India, his conception and building of the gigantic Brabourne Stadium in Bombay, his founding of the National Sports Club of India, the building of the National Stadium in New Delhi and his organisation of the first-ever Asian Games in India.

Born in Karachi in 1900, deMello became, during the First World War, probably the greatest sportsman of Sind. He captured his school and college in cricket, football and hockey and won many awards and distinctions for athletics.

His career at Cambridge was cut short by an unfortunate domestic tragedy. His elder brother was drowned in the English Channel when the ship in which he was travelling was torpedoed. This disaster necessitated his return to India. Mr. deMello missed earning the "Blues" in cricket and hockey at Cambridge, but he distinguished himself in the years to come on many different fronts in the world of sports.

Mr. deMello distinguished himself in cricket by dismissing England's greatest first-wicket pair, Hobbs and Sutcliffe, while playing in 1931 for All-India against Vizanagaram. He was mainly responsible for organising the first Test match ever to be played on Indian soil against top English and West Indies teams.

After obtaining affiliation to the Imperial Cricket Conference in 1929, Anthony deMello represented India on that body several times and arranged exchange of cricket tours between India and other Com-

mon-wealth countries. He also founded the Asian Cricket Conference in 1948 and was its first president.

He had occupied with distinction some of the top executive posts of various sports organisations. Among these were the presidentship of the Cricket Control Board, the presidentship of the Bombay Olympic Association and the vice-presidentship of the Amateur Athletic Federation of India.

He was also president of the Table-Tennis Federation of India, vice-president of the International Table Tennis Federation, vice-chairman of the National Sports Club of India, president of the 19th World Table Tennis Championship (Bombay, 1952) and Director of Organisation of the First Asian Games (New Delhi, 1951).

His private personality was no less unique. Full of dynamic vitality and unbounded enthusiasm he infected others with his own irrepressible zeal and zest for living. His book, "Portrait of Indian Sport", a candid commentary on Indian sport giving an account of the events of the past, of the disappointing present and pointing the way for the future might well be called his personal testament.

Mr. GARY COOPER

Mr. Gary Cooper, the famous American film star, died in Hollywood on May 13, 1961.

Hailed a typical American, Gary Cooper came of British stock. He was born Frank James Cooper, on May 7, 1901, at Helena in the cowboy country of Montana, the son of Charles M. and Alice Cooper. They had emigrated from England and Charles Cooper, a lawyer-rancher, became a Montana State Supreme Court Justice. Young Frank was born the same year when Owen Wister wrote his novel, "The Virginian," in which film Cooper first talked.

At the age of nine, Frank was sent to England to study at the Dunstable Grammar School in Bedfordshire, where his father had been at Grinnel College, Iowa, but soon he was injured in an auto accident and his father moved him to the United States.

ly ranch to recuperate. He broke his hip in the accident and it never healed completely—this, it seems, contributed to the characteristic gait of Cooper, now imitated by millions of fans.

Living two years in the ranch, he returned to Helena to resume schooling in art; he wanted to become a cartoonist.

After his sophomore year, he left college to work in a Helena newspaper, then moved on to Los Angeles to join a newspaper. Failing to get a job, Cooper sold advertisements for an agency but never let his parents know his low funds. It was then that he heard of opportunities in a nearby town for a tough young horseman as a rider and a stunt man in movies.

It was not an easy life, that of film extra and stunt man, but every time he fell off a horse before the cameras he thought of himself as that much nearer art school. He even engaged an actor's agent to further his career, and it was she who suggested changing his name, since several other Frank Coopers already were active in Hollywood. Her home town was Gary, Indiana, and it was this name that he adopted.

An obscure personality for more than a year, Cooper got a break in 1925 when Hans Tiesler singled him out from the mob to play in a two-reeler. He played in it opposite Eileen Sedgwick.

Gradually Gary Cooper rose from extra to "bit" to featured player. His big opportunity came in 1926 when he was given an important role in "The Winning of Barbara Worth".

Gary Cooper enjoyed undiminished popularity for more than 35 years and was twice awarded the "Oscar" for the Best Actor—in 1941 for his role in "Sergeant York" and in 1952 for "High Noon."

This year, Coop was honoured by the "Oscar" committee with a Special Award for the "many memorable roles he had portrayed."

Blue-eyed, brown-haired Gary Cooper was elected several times as one of ten top money making stars in the Motion Picture Herald Fame Polls in the United States.

For a time, Cooper "went out of the way" and moved around with Clara Bow (with whom he starred in "It"), Evelyn Brent, Tallulah Bankhead (his co-star in "Devil and Deep"), Countess Dorothy di

Frasso and Lupe Velez. He was really "serious" with Lupe Velez but, after his appearance in "Design for Living," at a surprise ceremony, he married the society beauty, Veronica Balfe—who appeared on the screen as Sandra Shaw (fondly called Rocky)—in December 1933. Gary leaves a daughter, Maria, born in 1937.

Cooper was converted to Catholicism in 1959.

Mr. CARL GUSTAVE JUNG

Mr. Carl Gustave Jung, (85), who pioneered the science of psychology with Sigmund Freud, died in his sleep at Kuesnacht (Switzerland) on June 6 1961.

Prof. Jung started as a physician, became a disciple of Sigmund Freud, only to break permanently away from the master. For, Sigmund Freud stuck to his theory that the id and the libido were the primary and the only instinctual drives, while Prof. Jung developed the theory that there were other driving forces, such as religion, that are as important as the sexual instinct. Although Prof. Jung did not succeed in disapproving the theories of Freud he did succeed in establishing a new school of analytical psychology. Prof. Jung spent most of his life as a teacher and a writer.

He was known as the father of analytic psychology, and was one of the first in this field to use word associations in his work. He was the founder of the Jung Institute a new school of psychotherapy in Zurich.

He associated with Freud in the theory and early development of the system for the analysis of mental processes known as psycho-analysis.

Mr. Jung also insisted upon what he called the "collective unconscious", a vast reservoir of common patterns of human experience and feeling that have reappeared in the history of civilisation and are expressed in the symbols, myths and legends of the races. He divided human beings into two groups—extroverts and introverts.

Mr. Jung was born in Kesswil, Switzerland on July 26, 1875, son of an Evangelical minister, and graduated in medicine from Basle University.

In 1913, the year of his break with Freud, he took part in the International Medical Congress in London. He then

tured at Bedford College and later in Aberdeen. He differed from Freud in the importance of sex in mental adjustment and disease, believing the true objective of the psychoanalyst is direction of the patient toward high ideals. In his **Modern Man in Search of a Soul** he tried to express creative impulse in art in the terms of auto-eroticism. His works, which number over 50, include **Studies in Word Association** (1918); **Contributions to Analytical Psychology** (1928); **Psychological Types** (1923); **The Secret of the Golden Flower** (with Richard Wilhelm) (1930).

In 1938, he became the first psychologist ever to receive the honorary degree of doctor of science from Oxford.

In more senses than one the death of Prof Carl Gustave Jung marks the end of an era. Although he was not the only pioneer to explore the unknown region of man's mental make-up known as the **unconscious**, Prof Jung—unlike the other two pioneers, Sigmund Freud and Alfred Adler who were essentially theoreticians—was the first to practise as a professional psychiatrist.

MAHARAJA HARI SINGH

Sir Hari Singh, late ruler of Jammu and Kashmir State, died in Bombay on April 26, 1961. He had abdicated in favour of his only son, Karan Singh (now Sadri-Riyasat J. and K State), in 1948 and since then he had been living in Bombay.

Since he ascended the throne in 1925, he had to face frequent uprisings in his state.

He suppressed the National Conference, which Shaik Abdulla reared up in that state. In 1946, when Jawaharlal Nehru went to the state, the Maharaja ordered his arrest. His then Dewan Ramachandra Kak, who had a European wife, was an autocrat, who regularly ill-advised the Maharaja. Kak had to finally flee from the state for his life, after a period of incarceration. He is believed to have settled down in England.

When India became free in August 1947, Hari Singh was in no mood to accede to India. He wanted to have an independent Kashmir even as Sir C. P. Ramaswami Aiyar wanted an independent Travancore. He acceded finally, only when he faced the tribes invading his state from Pakistan in October 1947. He abdicated in June

1948, and left the state for Bombay where he had been living till his death.

In Bombay, he led a very quiet life. He shunned social and public life, though he was regularly seen at the Mahalaxmi Race course.

Hari Singh was born in 1885, as the eldest son of the Raja General Amar Singh. His Highness Pratap Singh, who ruled Kashmir till 1925, had no son to succeed him to the **gaddi**. Therefore, Hari Singh, son of his younger brother, Amar Singh, was proclaimed ruler.

Hari Singh was educated at the Mayo College, Ajmer, and the Academy of Imperial Cadet Corps at Dehra Dun. In later life, he was Honorary A.D.C. to King George V and in 1944, was a Member of the Imperial War Council in London, along with Sir Winston Churchill.

Even before he ascended the **gaddi** Hari Singh created a great stir in 1925 in London in a **cause celebre**. It was the one in which he was victimised in a conspiracy, to the tune of £100,000.

Hari Singh had a Britisher as his A.D.C. even as a Crown-Prince. He plotted with some others to pinch that amount of money. Hari Singh was introduced to a European woman at a Paris hotel by the conspirators. While he was with her, a man posing himself as her legally married husband, blackmailed the Prince. To hush up the matter, a cheque for £100,000 was given by Hari Singh. Since the full amount was not there in the bank to the Prince's credit, the conspirators could only draw half that sum. Meanwhile Scotland Yard got scent of the fraud and the culprits, including Hari Singh's British A.D.C. were rounded up and put on trial. The London newspapers then were full of long reports of the case, and no less a dignitary of the English Bar in those days than the late Sir John Simon (Chairman of the Simon Commission) prosecuted the accused. Throughout the trial, Hari Singh's name was kept in the background and he was referred to in the court only as plain "Mr. A". The accused were all finally sentenced to various terms of imprisonment. During the trial, Simon referred to Hari Singh in great sympathy once as "that abject wretch in the dock" as the Kashmiri stood in the witness box testifying to the precise way the conspiracy against him went.

The sensational publicity accorded to

this case rather touched the sensitive Prince so much that he, in later years, took to a very quiet life. Even during his successive visits to England 'Hari Singh successive visits to England, 'Hari Singh as much as he possibly could. He would not even take prominent part in the Indian Princes Chamber.'

Hari Singh had a high regard for the intellect and general abilities of South Indians. He employed Saidai Panikkar as his Private Secretary, took legal advice often from Sri C P Ramaswami Aiyar and invited the late Sri N Gopalaswami Ayyangar as Chief Minister of Kashmir in the mid 1930s.

This Dogra Ruler who passed away in his 65th year had been elaborately written about by John Gunther in his 'Inside Asia' and another book the 'Life of Sri John Simon', only because of that sensational case of 1925'

* * *

RATHINDRANATH TAGORE

Mr Rathindranath Tagore, son of Rabindranath Tagore, died at his residence at Rajpur Dehra Dun on June 3 1961.

The only son of Poet Tagore Rathindranath, was born at Jorsanko Rajbati in Calcutta in 1888.

He had his early education in Santiniketan, where he was among the first batch of five students of the "Brahmacharya Ashram" started by his father. After passing his Entrance Examination of Calcutta University, he left for America in 1904 and obtained a degree in agriculture from Illinois University.

He returned to India in 1909 and joined the Viswa Bharati and was since then connected with that institution for an unbroken period till he retired in 1953. He became the first Vice-Chancellor of the University of Viswabharati in 1951 and occupied that position till 1953. After retirement for reasons of health he had been living in Dehra Dun.

Rathindranath's special hobbies were painting and woodwork and it was he who first introduced in the educational institutions of the country woodwork and leather work.

He had several publications to his credit.

He accompanied his father during the poet's tour to England and the U.S.A. in 1912.

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Parliamentary affairs

(April 24 To May 5, 1961)

CRIMINAL LAW AMENDMENT BILL PASSED

The Lok Sabha on April 24, passed, after an animated debate, the Criminal Law Amendment Bill arming the Government with adequate powers to curb anti-national activities in border areas.

Except the Communists, who raised a lone voice of protest against the measure describing it "Draconian", all sections of the House gave their massive support to it.

Home Minister, Lal Bahadur Shastri, said in his reply to the debate that there was no doubt the Communist Party had become more active in the border areas during the past few months and had established a number of new units there to step up its anti-Indian propaganda.

While assuring the House that the Bill was not a political move against any party, he uttered a warning that if the Communists continued their present activities in those areas and the situation deteriorated, they would automatically come within the ambit of the Act.

The Home Minister said there could be no half-way house so far as the country's territorial integrity was concerned. The Government could not tolerate any activity meant to weaken or demoralise the people in the border areas, especially in the context of the Sino-Indian border conflict. It was absolutely essential that the integrity of the country was maintained.

He twitted the Communists for not branding China as aggressor. While China had occupied several thousand square miles of Indian territory, the CPI was placing both India and China on the same level.

The main line of the Communist propaganda in the border areas was: that China had not committed aggression, border incursions were due to non-demarcation of boundaries and that India was far behind the Chinese in many fields.

He also described how a Communist weekly in U.P. published a State Government advertisement inviting the people to

face effectively the Chinese aggression and later apologised for having done so. This type of apology showed where the Communists stood.

The Home Minister enumerated the steps being taken to develop the border areas, especially the creation of new border districts in Punjab, U.P., Himachal Pradesh and Kashmir. The local authorities in those districts had been given vast administrative and financial powers to expedite matters.

The Centre had already sanctioned financial assistance of Rs. 3 crores to the State Governments for those regions.

DEBATE ON THE APPROPRIATION BILL

Refuting the Opposition criticism that there is increasing concentration of wealth in the country, Finance Minister Morarji Desai pointed out in the Rajya Sabha on April 27 that hardly 20 per cent of the national income was derived from mining and manufactures.

Half of this came from small-scale and cottage industries. The so-called concentration concerned only about one-tenth of the national output. If the growth of small enterprises and the indirect effect of the growth of large-scale enterprises or employment opportunities were taken into consideration there was little evidence to suggest any concentration of wealth, he said.

The Finance Minister who was replying to the debate on the Appropriation Bill turned down a suggestion that income-tax should be levied on the privy purses of former rulers.

Mr. Desai defended the Government's policy on foreign collaboration on the ground that the country was short of internal and external resources for rapid development. Further, it was also possible to secure scientific, technical and industrial knowledge and capital equipment along with foreign capital.

While foreign capital participation has been allowed in excess of 49 per cent in

few cases, Mr. Desai said that even in these cases whenever the company came up with expansion proposals, efforts were made to associate a greater percentage of Indian capital.

The Finance Minister said nationalization was not a matter of principle but of convenience. The indemnification given to U.S. investment against nationalization was necessary to ensure that the prestige and credit of the Government of India did not go down in the eyes of the world.

It was not correct, Mr. Desai pointed out, to say that the benefits of foreign collaboration went only to established business houses. During 1960, 300 cases of such collaboration were approved and a large number of them were in respect of new enterprises.

In this connection, he said, production of items like automobiles, aluminium, heavy chemicals, cement and fertilizers had necessarily to be undertaken in large factories if they were to be economical. When these industries were developed there would grow up in the private sector a large number of smaller units with capital of less than Rs. 10 lakhs for which licences would not be required.

The countervailing power against big enterprises, Mr. Desai said, was the public sector which was growing and would continue to grow. The third Plan and the successive plans would further strengthen the public sector.

PROMOTIONS IN THE ARMY

Intervening on the debate on the Appropriation Bill in the Rajya Sabha on April 26, Defence Minister Krishna Menon denied charges that there was dissatisfaction in the Army over recent promotions and appointments. Selections were made according to well-established procedures but the top in the Army is getting narrower and therefore some officers had to be passed over.

Mr. Menon said Army Commanders were appointed by the Government after consultation and discussion with the Chief of Army Staff. It then went to the Appointments Committee of the Cabinet consisting of the Prime Minister, Home Minister and the Defence Minister which finalized the selection.

Deprecating the treatment of this question on a political basis, Mr. Menon said that the Government could not abdicate

its responsibility in making the final decision. If it was continued to be felt that appointments were made without reference to any principle, the remedy was in the hands of the House. He said that the Army list was published but not circulated for security reasons.

Whether it made him popular or unpopular, Mr. Menon continued, common-sense and expert advice agreed that it was not possible to conduct large scale war on the Himalayas. But positions there and in the hinterland were well-guarded and there was no let-up in operations.

Referring to the purchase of Russian aircraft, Mr. Menon said that the only country which could deliver the planes over the counter was the Soviet Union. Moreover, India could pay for them in rupees, thus conserving foreign exchange. He denied reports that these planes were not doing well. "They have surpassed our expectations," he said.

The Indian Army, Mr. Menon said, had moved into the missile age. While he had to restrain himself in the matter, air-to-air and ground-to-air missiles were under study by the scientific research department.

Referring to criticism of the purchase of an aircraft-carrier, he said the purchase was in keeping with the general plan of defence. It was not a discarded weapon and it would keep away those who attempted to approach this country by sea.

Recoilless guns for anti-tank purposes were being produced in adequate quantities, Mr. Menon said, and anti-aircraft guns of a pattern and category higher than before was under production. Medium artillery was also being produced in sufficient quantities to meet the requirements of the army.

Mr. Menon said that in a very short period India would be self-sufficient in the production of explosives. Rocket-launchers were being established and the production of ammunition was increasing. Ordnance factories were producing alloy steels and high duty alloys which were essential for tanks and aeroplanes. Aluminium alloy for bridging equipment was also being manufactured.

LEGAL AID TO THE POOR

Before the Lok Sabha passed the Legal Practitioners Bill on April 27, Law Minister A. K. Sen informed the House that

scheme had been prepared for giving legal aid to the poor.

The scheme, he said, would be financed partly by State Governments and partly by contributions either from court fees or other sources. The last conference of the State Law Ministers had recommended that a part of the fees paid by lawyers to Bar Councils should be earmarked for legal aid to the poor.

These contributions, the Law Minister added, would, however, not be adequate. Other sources would also have to be tapped. The State Governments had demanded 50 per cent contribution from the Centre to implement the scheme.

Mr. Sen, who was winding up the debate on the Bill, said the British judicial authorities had agreed to introduce on a reciprocal basis members of the bar in one country to the bar of the other.

As a result of this decision, any member of the Indian bar would now be entitled to be called to the bar of England provided he has practised in this country for at least three years and eaten at least one or two dinners with the members of the British bar. The system of dinners he said was an old tradition in Britain.

The Law Minister described as unfortunate the decision of the Conference of Chief Justices of India that judges should not associate themselves with the bar councils. Bar and the judiciary, he said, were the two pillars of the legal system.

About the demand for doing away with solicitor system in Bombay and Calcutta, Mr. Sen said the people concerned did not want this abolition. Moreover, it was open to the two high courts to abolish this system by changing their rules.

* * *

FOREIGN AID FOR THIRD PLAN

Finance Minister Morarji Desai in the Rajya Sabha said on April 28 that internal consumption should be restricted to promote exports and earn foreign exchange. He was hopeful, however, of India getting all the foreign assistance envisaged in the draft outline of the third Five-Year Plan.

After Mr. Desai's speech winding up the debate on the Finance Bill, the House returned the Bill to the Lok Sabha without making any recommendation.

The Finance Minister remarked that if it was discovered at a later stage that additional foreign aid was required, the Gov-

ernment would have to either phase out the projects or seek more aid.

Referring to prices, he said that at present wheat and rice prices were declining because of sufficient stocks. Between 1956 and 1958 food prices were mainly governed by increase in the price of foodgrains. In 1959 the rise in prices was mainly on account of food articles other than foodgrains and there was also some increase in the prices of industrial raw materials and manufactures. Production of raw cotton, raw jute and oil seeds had declined, affecting prices.

He told the House that the Government was trying to find remedies whereby prices did not shoot up either before or after the Budget was presented.

The Finance Minister promised that the Government would give careful consideration to the recommendation of the Estimates Committee in regard to the investible funds of the Life Insurance Corporation. Until a decision was taken, the present policy would be followed.

Dealing with the criticism that LIC investments were not equitably distributed over different regions, Mr. Desai pointed out that equity investments could not be the same every where, as it depended on other factors, including the functioning of the stock markets. The LIC tried to make up the deficiency in investments by subscribing to State loans.

Referring to criticisms against communication facilities given to a newly-started news agency, Mr. Desai explained that the Government was subscribing only to the Press Trust of India. It did not subscribe to the other two agencies. The Indian News Service satisfied the general criteria laid down and that was why it had been given communication facilities.

Mr. Desai said the Government had examined the structure of the INS and its proprietorship had been made broader by the inclusion of some more people.

* * *

INDIA'S TERRITORIAL INTEGRITY

The Rajya Sabha on May 3 passed the Bill providing for punishment to persons who question the territorial integrity or the frontiers of India in a manner prejudicial to the country's safety and security.

Replying to the general discussion in the Rajya Sabha, the Home Minister, Shri Lal Bahadur made it clear that nowhere

sought under the Bill would not be used in any arbitrary manner. Any fear that the Bill was directed against any political party as such was unfounded. Prosecutions against the accused would be launched in law courts and there would be the right to appeal to higher courts.

Justifying the Bill, the Home Minister said for every country its borders were sacrosanct. All kind of propaganda was being carried on in the sensitive border areas and the Communists were openly saying that China had not committed any aggression against India and as a Socialist country, it could not do so. Shri Lal Bahadur characterised as unpatriotic the propaganda in the areas aiming at creating uneasiness and dissatisfaction among the people. India was sorry that because of the difficult food position in China, large numbers of people there were living at a starvation level but the Communist Party of India had nothing to say about it. They carried on the propaganda that conditions were far better in Tibet than in our frontier areas.

FACTS AND FIGURES

Mekong Project: Deputy Minister for Finance Mrs. Tarkeshwari Sinha informed in the Rajya Sabha that India was contributing Rs 12.5 lakhs for the first stage of the Mekong River Project in the South-East Asia.

This amount, she said, would cover mostly the salaries and allowances of Indian engineers and their travel expenses, as well as some equipment supplied for the project.

History of Freedom Movement: The total cost of publishing the three volumes of the History of Freedom Movement was expected to be below Rs. 7 lakhs and the remaining two volumes would be published in the next two years, Deputy Minister for Scientific Research and Cultural Affairs M. M. Das told in the Rajya Sabha.

Dr. Das said the compilation of the first volume of the history was taken in hand in November, 1957, and till March 31, 1961, Rs. 1,02,909.15 had been spent. The cost of printing and publication was Rs. 22,500.

Scientists' Pool: Dr. Das told the Rajya Sabha that 49 scientists had accepted offers for temporary placement in the pool of scientists in 1959.

Selection to the pool was done by the Union Public Service Commission, which

was assisted by a special recruitment board. Initially, applications were invited by public advertisement, but as this entailed some delay, steps had now been taken to ensure that the selection of qualified scientists to the pool was made on a continuous basis and scientists and technologists with high qualifications did not have to wait unduly.

Indian Troops In Congo: Deputy Defence Minister K. Raghuramiah told in Rajya Sabha that the estimated cost of maintenance of the Indian troops lent to the UN for operations in the Congo was Rs. 73.43 lakhs, on account of their normal pay and allowances. This was borne by the Government of India and all additional expenditure on them was borne by the UN.

"If and when units are raised in India to replace those placed at the disposal of the UN, the cost of such additional units is also borne by the UN," he said.

Spies In Government: In reply to a question, Deputy Minister for External Affairs Mrs. Lakshmi N. Menon said in Rajya Sabha that during the past 10 years, four officials of the External Affairs Ministry had been charged departmentally and one officially with supplying information to members of foreign missions in Delhi.

Foreign Exchange: India paid Rs. 24.65 crores in foreign exchange on account of interest on foreign loans during 1960-61.

Pak Violation of Indian Air Space: There were eight violations of the Indian air space by Pakistani aircraft between Jan. 6 and March 1, according to a statement placed on the table of the Lok Sabha by the Parliamentary Secretary to the Defence Minister, Mr. F. P. Gaekwad.

On Jan. 23, the Pakistan aircraft penetrated 65 miles into the Indian territory. There was another violation on the same day, the extent of penetration being 20 miles.

The extent of penetration on other days was as follows: On Jan. 6—12 miles; Jan. 8—12 miles; Jan. 14—6 miles; Feb. 12—10 miles; Feb. 13—25 miles; and March 1—10 miles.

Steel Plant: Steel, Mines and Fuel Minister Swaran Singh told the Lok Sabha that final decision about the proposed steel plant in Madras would be taken after the results of the commercial test of the lignite-iron ore and limestone were known.

He also said the State Government

considering a proposal to use iron ore deposits in Mohindergarh district in Punjab by setting up a low shaft furnace.

Mr. Singh also said 15,000 tons of billets had been placed at the disposal of the small-scale industries development commissioner for allotment to small re-rollers in various States.

Export of Films: Finance Minister, Morarji Desai, told the Lok Sabha that Indian films were exported to foreign countries either on outright sale or on rental basis.

Asked if it was a fact that a lot of foreign exchange was lost, because correct income figures were not available, Mr. Desai replied in the negative.

Transistor Sets: Mr. Shah told in Lok Sabha that the manufacture of transistor radio sets in India had already started. The target of 1,00,000 sets would be easily reached by the end of the year. The quality of the sets was good, he said.

Repairs To Mosque: Deputy Minister of Scientific Research and Cultural Affairs M. Das told in Rajya Sabha that Rs. 24,326 had been sanctioned by the Government for repairs to the Shahjahan Mosque at Ajmer.

Polyethylene Project: Steel, Mines and Fuel Minister, Swaran Singh, told in Rajya Sabha that the polyethylene project at Naharkatiya was estimated to cost about Rs. 6.25 crores and the plant was anticipated to reach an annual capacity of 4,000 tons by 1967.

The CIS-4 polybutadiene project at Naharkatiya would cost about Rs. 9 crores and by 1967 the plant's production would be 20,000 tons, he said.

Seven projects based on natural gas would be set up at different places in Assam, he added.

UNESCO Aid: The United Nations Educational, Scientific and Cultural Organization has approved assistance to India to the extent of Rs. 75,60,952 for technical education and scientific research programmes.

For the Sons of Jawans: A proposal is under consideration to institute Central Government scholarships in each of the Sainik Schools for the children of Defence Services personnel. Liberal scholarships by the State Governments concerned to enable meritorious students to study at

these Schools are an integral part of the Sainik School Scheme. According to present indications, about 40 per cent or more of the boys in each of these schools are likely to get financial assistance on the basis of merit and the means of the parents.

Incentives for Sterilisation: The programme of adult sterilisation providing monetary incentives is receiving more attention in the country than was expected by Government. In Maharashtra, about 15,000 vasectomies were performed during a period of six weeks. The scheme has been extended to all States. In Delhi, male volunteers for sterilisation are paid Rs. 15 and females Rs. 25.

Less Noisy Telephone: The Indian Telephone Industries at Bangalore has designed a new and less noisy telephone. The new telephone has been developed with an improved telephone receiver, circuit and bell. About 10,000 telephone instruments of the new type are proposed to be manufactured during the current year.

Coastal Coal Transport: Forty-two ships would be required for transporting two million tons of coal a year from Calcutta to Southern and Western Indian ports. Of these, 36 are already being employed by the Indian Shipping Companies on the coast. Six more ships would be diverted by then from their overseas employment. No extra freight would be paid for the transport of this coal.

Drugs Export: India is now exporting drugs and pharmaceuticals worth about Rs. 82 lakhs to Rs. 90 lakhs a year. Among the countries where the drugs are exported are Britain, the U.S.A., Pakistan, Burma and some West Asian countries.

Newsprint: The country is expected to be self-sufficient in newsprint by the end of the Third Plan. The demand would then be about two lakh tons a year. Presently 85,000 tons are being imported.

* * *

PARLIAMENT ADJOURNS

Both Houses of Parliament adjourned sine die on May 5 at the end of the Budget session.

On May 6, the two Houses met in a joint session, the first in their history, to consider the Dowry Prohibition Bill, which had led to differences between them.

(See Home Affairs)

HOME AFFAIRS

DOWRY PROHIBITION BILL PASSED

The first ever held joint session of Parliament concluded its two-day sitting on May 9 after accepting the compromise amendments of the Law Minister, Mr. A. K. Sen, to the two controversial clauses of the Dowry Prohibition Bill.

The session thus resolved the differences between the Lok Sabha and the Rajya Sabha on one of the most important pieces of social legislation undertaken by the present Parliament, with both Houses having their way partially.

Under Article 108 of the Constitution, the Bill, in its amended form, is deemed to have been passed by the two Houses separately.

The Bill, as passed, prohibits and penalizes the demanding or giving and taking of dowry directly or indirectly. It was decided to retain the "Explanation" which excludes from the definition of dowry gifts made on the occasion but not in consideration of the marriage.

The chief controversial section of the Bill, the "Explanation," excluding from the term "dowry" cash, ornaments, clothes or other articles given at the time of marriage to the bride or the bridegroom "except as consideration for the marriage," was upheld by the joint session. It rejected an amendment seeking to drop this "Explanation" by 230 votes to 192. (This was a defeat for the Rajya Sabha which had suggested its deletion when that House considered the Bill.)

The joint sitting, however, accepted the Rajya Sabha's amendment that dowry, given or agreed to be given "directly or indirectly," should be penalized. The Lok Sabha, while considering the Bill, had not agreed to the change suggested.

The third difference between the two Houses—the penalty clause making infringement of the main provision of the Bill punishable with imprisonment, which may be extended up to six months or a fine of Rs. 5,000 or both—was smoothed over by accepting an official amendment in the nature of a proviso to this clause.

The proviso, which is intended to counter frivolous accusations, states that "no court shall take cognizance of any offence under the Section except with the previous sanction of the State Government or of such officer as the State Government may, by general or special order, specify in this behalf."

The Rajya Sabha had suggested that to avoid harassment the entire penalty clause be deleted, a view not favoured by the Lok Sabha.

The Congress Party issued a whip for voting on all the controversial clauses except on the "Explanation." The Jan Sangh voted with the majority on the Congress benches for retaining the "Explanation." The Communist, P-SP and Socialist groups voted for its deletion.

(The Dowry Prohibition Bill was first introduced in the Lok Sabha on April 24, 1959, by the Law Minister, Mr. A. K. Sen. This contained a provision exempting from the purview of the Bill presents in the form of clothes and ornaments which are customary at marriages "provided the value thereof does not exceed Rs. 2,000." A Joint Select Committee under the chairmanship of Mrs. Renu Chakravarty (Communist), dropped this provision, made indirect giving of dowry also punishable and enhanced the penalty by suggesting the infliction of imprisonment as well as fine on breakers of the law in this regard. Eight members of the Select Committee recorded minutes of dissent. The Lok Sabha passed the Bill on December 9, 1959 after adding the "Explanation" exempting from the purview of the Bill the giving of cash, clothes, ornaments or other articles except as considerations for the marriage. The Rajya Sabha, which considered the Bill on December 16, 1959, suggested, among other things, the deletion of the "Explanation" as the House felt it would nullify the effect of the Bill. It suggested the dropping of the penalty clause because that might cause undue harassment. The Lok Sabha did not accept any of the changes suggested by the Rajya Sabha. The President, thereupon, summoned a joint sitting of the two Houses.

under Article 108 of the Constitution to consider the Bill.)

ANNAPURNA III CLIMBED BY INDIAN EXPEDITION

The Nepalese Foreign Office announced on May 8, 1961 that the Indian Expedition to Annapurna III had conquered the 24,858 ft. high peak.

The peak was scaled at 4-15 p.m. on Saturday, May 6, by Instructor-Lieut. M. S. Kohli, Leader of the Expedition, Sonam Gyatso, an Indian civil servant, and Sherpa Sirdar Sonam Girmi.

This is the first major virgin peak to have been climbed by an all-Indian Expedition. The peak was climbed at the second attempt which, the seven-man team made within a fortnight.

The climbers left Delhi on the Expedition on March 18, 1961.

The Indian team's first attempt was foiled by waist-deep fresh snow on April 26 when the mountaineers had to retreat to the base camp.

The spectacular success came as a climax to the Herculean trek to the top which lasted 13 hours. Starting from Camp IV at 6 a.m. on May 6, the three mountaineers reached 24,000 ft. at 2 p.m. when the weather conditions worsened. Undaunted, Lt. Kohli decided to press on and after another gruelling 135 minutes the three climbers stood on top of the proud peak where they planted the Indian and Nepalese flags.

The mountaineers then hurried back in worsening weather and reached Camp IV at 7 p.m.

Lt. M. S. Kohli, some years ago, conquered the Nanda Devi peak, leading an Indian Navy team. He was also a member of the Indian Everest Expedition in 1960 which was forced back by bad weather. Sonam Gyatso has already climbed the Cho Oyu peak, sixth highest in the world.

The Expedition had to pioneer a route to the summit never before tried.

Besides the Leader, the other members of the Expedition were: Sonam Gyatso, Capt. A. B. Jungalwala of the Army, Chief Yeoman of Signals K. P. Sharma and Lt. V. S. Shekhawat of the Navy, Flight-Lt. P. C. Chaturvedi of the Air Force, and Dr. A. N. D. Nanavati.

The Expedition was sponsored by the Mountain Mountaineering Foundation.

With the ascent of Annapurna III, all the four peaks in the range have now been climbed. Annapurna I (26,504 ft.) was first climbed in 1950 by a French expedition headed by Maurice Herzog, those getting to the top being the leader himself and Louis Lachenal. Annapurna II (26,014 ft.) was ascended last year (1960) by a British-Indian-Nepalese Services team, led by Lt. Col. J. O. M. Roberts, those reaching the peak being R. G. Grant and C. G. Bonington, with Sherpa Ang Nyima. The Indian members of this team were Capt. Jagjit Singh and Capt. M. A. Soares. Annapurna IV (24,688 feet) was first scaled in 1955 by a German team led by Herr H. Steinmets, the climbers being H. Biller, J. Wallenkamp and the leader, and a second time in 1957 by a British expedition headed by Dr. Charles Evans, those getting to the top being Dennis Davis and the leader. The Annapurna massif is separated by the other enormous mountain group of Dhaulagiri by only 20 miles, one being to the east and the other to the west of the Krishna-Gandaki River valley.

N.D.C. APPROVES DRAFT THIRD PLAN

The National Development Council ended its two-day session in New Delhi on June 1 after broadly approving the final draft of the Third Plan.

Intervening in the discussion, Shri Nehru said that in spite of the present financial limit of Rs. 7,500 crores being retained for the public sector, there were certain hopeful indications that the financial resources might be much larger. The Prime Minister said he would like a careful analysis to be made of public undertakings and each one given a precise target which should be a little more than what the undertaking was capable of achieving. Shri Nehru felt that the whole problem had to be approached not only in a spirit of optimism but urgency. India, he said, was at a turning point in her history but somehow that was not reflected in the public mind at all. What was required was country-wide enthusiasm so that people's minds might not be fixed on other controversies and disruptive tendencies.

The Council discussed in detail chapters relating to financial resources, the outline of the Third Plan and price policy. On the question of financial resources, the emphasis by State Ministers, who were

(Continued on Page 673)

FOREIGN EVENTS

AMERICAN ASTRONAUT LAUNCHED INTO SPACE

Commander Alan B. Shepard (37), a U.S. Navy test pilot, became on May 5 the second astronaut to make a flight in outer space, following Major Gagarin's orbital flight in the Soviet spaceship **Vostok** three weeks earlier. The space capsule containing Commander Shepard was fired from Cape Canaveral by a **Redstone** rocket to a height of 115 miles; travelling at 5,100 m.p.h., it was successfully recovered from the Atlantic 15 minutes later at a point 302 miles from the launching-site. Commander Shepard had an intensive medical examination immediately after his space flight and was found to be in perfectly normal condition, despite the fact that he had been subjected to forces 11 times that of gravity on re-entering the earth's atmosphere.

Unlike Major Gagarin in the **Vostok**, which was automatically controlled from the ground, Commander Shepard was in manual control of the space capsule throughout its 15-minute flight. During this period he watched over 120 instruments, fired three retro-rockets, and sent frequent messages to ground stations on his progress.

Whereas the preparations for launching the **Vostok** had been undertaken in secrecy, the launching of the U.S. space capsule was accompanied by the greatest publicity, both prior to the launching and during the flight itself. The firing of the **Redstone** rocket was televised throughout the United States and there was great jubilation at the success of the experiment and at Commander Shepard's space flight.

President Kennedy congratulated Commander Shepard by radio-telephone a few minutes after the astronaut had been taken on board U.S.S. **Lake Champlain**.

Commander Shepard was flown on May 8 from Grand Bahama to Washington, where he was reunited with his wife, Mrs. Louise Shepard, and other members of his family. With Mrs. Shepard, he was then flown by helicopter to the White House, where he was warmly welcomed by

President Kennedy, Mrs. Jacqueline Kennedy (wife of the President), and senior officials of the National Aeronautics and Space Administration. After being decorated by the President with the Distinguished Service Medal of the N.A.S.A. Commander Shepard drove in an open car to the Capital, amidst the cheers of 250,000 people, to attend a reception given in his honour by Senators and members of the House of Representatives.

Later in the day Commander Shepard held a press conference at which he replied to questions by a number of correspondents; throughout the conference he declined to speak of himself in the first person, insisting that the credit for his achievement was shared equally by the engineers, technicians, officials, and astronauts engaged on the Project Mercury programme.

Alan Shepard's flight was the climax of a two and half year's work and 400 million dollars (about £140 million sterling) expenditure.

GHANA, GUINEA AND MALI TO MERGE

The African States of Ghana, Guinea and Mali decided on April 29, 1961 to merge into a Union of African States.

A Charter of this new Union was signed at Accra by President Kwame Nkrumah of Ghana, President Sekou Toure of Guinea and President Modibo Keita of Mali.

The Charter, which must be approved by the three Parliaments, was the partial realization of the Pan-African ideal advocated by the Governments of the three countries.

The three countries of the Union appointed a committee in December, 1960 to work out practical steps for merging the military commands of the three countries and co-ordinating their foreign and cultural policies.

The Charter, which was not immediately published, was drafted after a study of the Committee's recommendations.

The Union was formed in December, 1960 when Mali, which four months earlier had severed its federal

Senegal, joined the two-year-old Ghana-Guinea Union. A communique issued at the time said that a "common economic and monetary policy" would be promoted and there would be common diplomatic representatives. The intention was to create a loose political association rather than a closely knit political system.

The idea of a Union of African States was set afloat in November, 1958, when the Heads of States of Ghana and Guinea proclaimed a Ghana-Guinea Union as a nucleus. On the creation from the former French Sudan of Mali Republic, the new Republic announced that it was joining the nucleus.

Meeting in Guinea's capital Conakry, in December, 1960, the three Heads of State formally agreed in principle to enlarge the Union to include Mali. A committee was appointed to study practical ways of effecting a Union with particular reference to merging the three countries' military commands, currencies, foreign affairs and cultural policies.

The joint communique said that the firm decision and the Union Charter followed the examination of the Committee's recommendations.

Exactly how far the Union will go would not be known until the Charter is published. But observers consider the Accra Conference to be the most important since the idea of a Union was first proclaimed.

All the three Heads of State took into the Conference key members of their Governments—Defence and Foreign Affairs Ministers and senior officials of their national banks.

A unified flag and Parliament may not be round the corner but the Conference proved the will of the three leaders to work towards the closest possible co-operation and co-ordination of policies.

True education makes for inequality; the inequality of individuality, the inequality of success; the glorious inequality of talent, of genius; for inequality, not mediocrity, individual superiority, not standardization, is the measure of the progress of the world. —**Felix E. Schelling**

Better see rightly on a pound a week than squint on a million. —**Shaw**

HOME AFFAIRS

(Continued from page 671)

members of the Savings Committee, was that it was possible to raise resources to the extent of Rs. 8,000 crores or even Rs. 8,300 crores by mobilising larger resources under several heads and by economy at the Centre and in the States. Among the suggestions made were that Central public sector projects should be able to contribute more and if necessary a directive should be issued to them to fulfil certain targets. State power projects and the Life Insurance Corporation could also contribute more. The State Ministers felt that if it was not possible to increase the total outlay for the public sector immediately, it was essential that there should be no reduction in the allocation for social services, specially education, and transport and communication projects should have a much higher priority.

The Finance Minister examined the resources under each major head and expressed the view that at present even the outlay of Rs. 7,500 crores should be considered optimistic. He said he had dared and acted this year by levying additional taxation and expressed the hope that the States would also act similarly.

To fight is a radical instinct: if men have nothing else to fight over they will fight over words, fancies, or women, or they will fight because they dislike each other's looks, or because they have met walking in opposite directions. To knock a thing down, especially if it is cocked at an arrogant angle, is a deep delight to the blood.

—**George Santayana**

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CRICKET

England-Australia Test Matches

First Test: The first test between England and Australia played on June 8, 9, 10, 12, and 13 at Edgbaston (Birmingham) ended in a draw. The final scores were: England 195 and 401 (for four); Australia—516 (for nine declared). The captains of the teams were: M. C. Cowdrey (England), R. Benaud (Australia).

There were all chances of Australia's winning at the close of the play on June 10, but rains spoiled the game when resumed on June 12 and on June 13 R Subba Row and Dexter played magnificently well and saved England from the possible defeat. R. Subba Row and Dexter scored 112 and 130 respectively.

HOCKEY

Women's National Hockey Championship

Mysore retained the women's national hockey championship with a 2-1 victory over Madras in the final at Bhopal on May 22.

Mysore's centre-forward A. Nirmala netted both the goals, one in each half.

BADMINTON

World Badminton Title

Indonesia retained its world badminton title defeating Thailand in the challenge round of the Thomas Cup on June 11 at Jakarta. Following are the results:

Singles: Tan Joe Hok (Indonesia) b Channarong Ratnasaengsang (Thailand) 15-9, 15-5; Ferry Sonnevill (Indonesia) b Somsook Boonyasuhanon 15-3, 15-11; Sonnevill (Indonesia) b Channarong (Thailand) 19-5, 15-4; Edde Yusuf (Indonesia) b Narong Bhornchina (Thailand) 15-4, 15-7; Tan Joe Hok (Indonesia) b Somsook (Thailand) 15-2, 15-5.

Doubles: Narong Bhornchina and Raphi Kanchanaraphi (Thailand) b Jan Joe Hok and Lie Po Djian (Indonesia) 15-7, 15-3; Chavalert Chumkum and Chunchart Yatanathan (Thailand) w/o Tan King Gwan and Njoo Kim Bie (Indonesia).

BOXING

World Light-Heavy Weight Title

Archie Moore retained the world light-heavy weight title defeating Italy's Giulio Rinaldi on points on June 10 at New York.

RECORDS

World Pole-Vault Mark

George Davis, of Okalahoma State, cleared 15 ft. 10 $\frac{1}{4}$ in. on May 21, at Boulder, Colorado, to break Don Bragg's world pole vault record.

Davis barely ticked the bar with his chest as he descended from his record-smashing vault. He cleared the bar on his third try to beat Bragg's mark of 15 ft. 9 $\frac{1}{4}$ in.

27-Foot Jump Barrier Cleared

Olympic champion Ralph Boston became the first man in history to break the 27-foot barrier in the broad jump on May 23 at Modesto (California) when he leaped 27 feet $\frac{1}{2}$ inch at the California relays.

3,000-metre Steeplechase Record

Grigori Taran, a Ukrainian, set a world record in the 3,000 metres steeplechase at an athletics meeting in Kiev on May 20.

Taran clocked eight minutes 31.2 seconds to clip two-tenths of a second from the existing world record.

World Javelin Record

Carlo Lievore, of Italy, broke the world record for the javelin with a throw of 86.71 metres (284 ft. 5 $\frac{3}{4}$ in.) on June 1 at Milan.

The record was previously held by Al Cantello; of U.S., who threw 86.04 metres (282 ft. 3 $\frac{1}{2}$ in.) in California two years ago.

SPORTS INFORMATION

Australians to oppose Open Tournaments

The Australian Lawn Tennis Association decided on May 15 to oppose the British and American proposals for open tournaments when the International Federation hold their annual meeting in Stockholm in July.

Britain's proposal is that, as an experiment the Wimbledon and other official championships should, if desired, be allowed to accept entries from professionals as well as amateurs in 1962.

Australian Women to Tour London

After "Benaud's boys" it will be the turn of Australian women cricketers to tour London.

The Australian Women's Cricket Council has accepted an invitation from the Women's Cricket Association, London to tour England in 1963. The Association will raise £3,580 to finance the tour.

An English women's team recently returned home after a successful tour of South Africa.

Kanhai Honoured

Rohan Kanhai, the West Indies Test batsman, has been awarded the Karl Nunes trophy for the most valuable contribution to the team on the West Indies' tour of Australia.

Edgbaston Memories

The first Test which opened at Edgbaston, Birmingham, on June 8, was a game bridging more than 50 years of time since when this venue lost its status as a Test ground and regained it in 1957.

The last time an Australian side played in a Test at this ground was in 1909. The first time was in 1902, and the coming Test will be the third such occasion.

England have happy memories of this ground.

In 1902 Australia were dismissed for their lowest Test innings of 36 and only heavy rain saved them from a crushing defeat. Wilfred Rhodes was the main cause of their troubles; he took seven wickets for 17 runs.

In 1909, England again won by the comfortable margin of 10 wickets. Scoring was again low. Australia knocked up 74 and 151.

Since emerging once more as an international ground Edgbaston has seen three Test sides: the West Indies, New Zealand and, last summer, South Africa.

Botvinnik Hints at Retirement

World Champion Mikhail Botvinnik on May 13 attributed his recapture of the world chess title to insufficient preparation on the part of Mikhail Thal.

At a news conference, following the final game of their title match, Botvinnik also hinted he may retire before the mandatory defence of his title in 1963.

When a journalist asked the 50-year-old champion who might be his opponent in 1963, Botvinnik answered, "Why specify me? I cannot say at this time if it will be me or may someone else."

Meanwhile, he said there were two foreigners, American Bobby Fisher and Yugoslavia's Svetozar Gligoricah, as well as Soviet contenders besides Thal who might win a chance at the title in 1963. Botvinnik mentioned, among others former world champion Vassily Smyslov and Estonian Paul Keres.

Thal, under new rules in effect this year, will have to win next year's scheduled contenders' tournament to get another chance at the title. This year's match was under old rules which allowed the defeated champion a re-match automatically at the end of one year.

All Fijian Soccer Stars Are Indians

Australians have been puzzled because all the Fijian soccer football players now touring Australia are Indians. They have been asking: don't any of the Fiji Islanders play soccer?

Fijian team manager Andrew Deoki explains that until about 30 years ago the Indians living in Fiji and the Fiji Islanders themselves were enthusiastic soccer players, and the rivalry between them was keen, although the Indians were always superior.

The Indians were more lively, agile and quick on the field than the native Fijians, and displayed greater talent for delicate and intricate movements needed for victory.

When rugby football was introduced to the island about 30 years ago, most of the native Fijians changed from soccer to rugby, leaving the soccer fields almost exclusively to the Indian footballers.

Award in Memory of De Mello

The Delhi and District Cricket Association has decided to institute this year an Award for the "Outstanding Cricket of the Year" in the memory of the late Mr. A. S. De Mello. This decision was taken at a meeting of the D.D.C.A. Sports Committee which met at the Willingdon Pavilion on Monday to condole the death of their former President.

It was also decided to ask the Board of Control for Cricket in India to institute a match in the memory of Mr. De Mello. The D.D.C.A. agreed to donate a trophy and stage the first match in the Capital.

A Son To Krishnan

Lalitha, wife of Krishnan, Indian tennis champion, gave birth to a son on June 5 at Tanjore.

Olympic Village Plan Being Studied

The fond dream of Mr. A. S. de Mello to have an Olympic Village in India may shortly come true.

Before he could see the fruition of his dream, death cut short Mr. de Mello's chequered career in Indian sports. He had worked on the scheme for well over two years and submitted it to the Prime Minister, Mr. Nehru.

It is learnt from reliable sources that Mr. de Mello's scheme is now receiving the attention of officials and that the Village may come into being before 1966. May be, the next Commonwealth and British Empire Games will be held in it.

It is understood that over 200 acres near Rajghat in Delhi have been reserved for the proposed village which will have a stadium and indoor arenas for badminton and table tennis.

The plan also envisages an indoor cricket school on the lines of Gover's School in England.

Eight-Ball Over Is Proposed

The introduction of the eight-ball over in Ranji Trophy matches in future is one of the several amendments proposed by the Special Ranji Trophy Sub-Committee appointed by the Board of Control for Cricket in India.

The amended rules will be placed before the meeting of the Board next month for approval.

A change in the system of awarding points in Ranji Trophy matches has been proposed by the committee. Three points, instead of two, are to be awarded to the teams if the first-innings result is not obtained, or even if the match is abandoned without a ball being bowled. One bonus point is to be given to the team which scores faster, provided the team scores not less than three runs an over. The average number of runs per over shall be calculated on the total number of overs played by

a team in the match. In the event of both teams obtaining the same average per over, the bonus point shall be awarded to that team which has obtained the average in a lesser number of overs.

The venues of Ranji Trophy matches will be fixed according to the principle of rotation. A match which is abandoned without a ball being bowled will not be replayed. There have been instances when associations have postponed their ties in such cases and have replayed their matches. When two associations in a zone meet for the first time the match shall be played at the venue of an association which can provide a turf wicket. In case both the associations can provide turf wickets, the senior association will be given preference.

The committee has laid down that all the matches in each zone should be completed before December 15, the quarter-finals by December 31, the semi-finals by January 15 and the final by January 31. No postponements would be given to teams whose players are engaged in the Inter-University Tournament or in matches against a visiting side.

Zonal Basis in National Badminton

The National Badminton Championship will hereafter be played on a zonal basis.

According to by-laws issued by the Badminton Association of India, the existing associations are split into four zones.

The North zone, will consist of Delhi, Punjab, Rajasthan and Uttar Pradesh and the West of Gujarat, Madhya Pradesh and Maharashtra. The newly-affiliated Services will be grouped with Assam, Bihar and Bengal in the East Zone, while Railways will form the South Zone with Andhra Pradesh, Madras, Mysore and Kerala. The entires for the year close on July 15.

The winners of each zone will play the nationals at Amritsar in the first week of December. The zonal tournaments should be over at least a month before the nationals.

German Hockey Team For India

The West German national hockey team will tour India in 1962 to participate in the 60th anniversary celebrations of the Indian Hockey Association.

The team will play 14 matches.

Appointments, Awards etc.

APPOINTMENTS

Mr. Narapratap Thapa, Ambassador designate of Nepal to India, presented his credentials to the President, Dr. Rajendra Prasad, in New Delhi on May 18.

Mr. Justice Himansu Kumar Bose, was appointed to perform the duties of Chief Justice of Calcutta High Court, in place of **Mr. Justice Surjit Chandra Lahiri** who has been appointed to act as Governor of West Bengal during the absence abroad of Mrs. Padmaja Naidu for eight weeks from June 3 for reasons of health.

Gen. Curtis E. Lemay was nominated on May 22 to replace Gen. Thomas D. White as the U.S. Air Chief of Staff.

Mr. Raj Narain Singh was elected on May 24 as the Chairman of the Socialist Party of India for the year 1961-62. **Mr. Rabi Roy** of Orissa was elected General-Secretary of the party.

Mr. Justice Gopalji Mehrotra was appointed Chief Justice of Assam High Court upon the retirement of Mr Justice Holiram Deka, with effect from June 30.

Mr. A. B. Pant, political officer in Sikkim, was appointed Indian Ambassador to Indonesia on May 29.

Master Tara Singh was re-elected President of the Shiromani Akali Dal on May 29.

Brigadier Raja was appointed Commander-in-Chief of the U.N. troops in Northern Katanga on May 30.

Dr. V. R. Khanolkar, a pathologist of Bombay, was elected to the Soviet Academy of Sciences on May 30.

Dr. Abdullah Omar Abu Shamma of Sudan was unanimously elected President of the World Health Organisation's Executive Council on May 29.

Mr. Rafael Trujillo (Junior), son of the assassinated dictator Mr. Rafael Trujillo, was named head of the armed forces of Dominican Republic on June 1.

U Tin Maung of Burma was elected President of the Trusteeship Council of the U.N. on June 1.

Sir James Robertson was appointed Chairman of the Commonwealth Institute on June 7. He succeeds Lord Dundee, who has served since 1957.

Air Force General, **Mr. Venancio Deslandes**, was appointed Governor-General and Commander-in-Chief of Angola on June 3.

Delhi's first Labour Commissioner, **Mr. L. S. Titux**, took charge of the newly-created Labour Department on June 5.

Mr. C. H. Mohammed Koya, nominee of the three alliance parties, was elected Speaker of the Kerala Assembly on June 9.

Gen. Charles Ailleret replaced Gambiez as French Commander-in-Chief in Algeria on June 13.

Mr. V. T. Krishnamachari was nominated to the Rajya Sabha by the President on June 13 in place of Mr. K. M. Panikkar.

RESIGNATIONS

Academician **Aleksander N. Newsmeyanov**, who masterminded the campaign that put **Major Yuri Gagarin** into space retired on May 19.

Mr. Rajeshwar Dayal resigned his job as U.N. Special Representative in the Congo on May 24 and his resignation was accepted by **Mr. Dag Hammarskjöld** the same day.

Dr. Geoffrey Fisher retired on May 31 after 16 years as Archbishop of Canterbury. **Dr. Michael Ramsey**, Archbishop of York, succeeds him.

Sardar K. M. Panikkar, who assumed charge as Vice-Chancellor of Jammu and Kashmir University, resigned his membership of Rajya Sabha on June 2.

Mrs. Durgabhai Deshmukh resigned from the Chairmanship of the National Council for Women's Education on June 3. She was dissatisfied with the total allocation made in the Third Plan for women's education.

AWARDS

The Indian Tourist Office in Paris was awarded the first prize for the best publicity during the past 12 months by the French Association of Tourism Journalists on May 26.

Prof. K. R. Ramanathan of India's Research Laboratory, Ahmedabad was awarded the 1961 prize of the International Meteorological Organisation for his outstanding work in meteorology.

The International Committee of the Red Cross awarded the Florence Nightingale Medal for 1960-61 to **Miss Mariam Korah**, Superintendent, Lady Reading High School, Delhi, for outstanding devotion to duty as a nurse and organiser of nursing education.

(Continued on page 680)

NEWS Diary

MAY

15. The Soviet Union threatened a walk-out from the three-power nuclear test ban conference, held at Geneva, and resume testing, if France or any other Western power carried out further nuclear explosions.

Oil was struck in the sixth well in Digas village in the Ankleshwar area at a depth of 1,224 metres.

The Coquilhatville conference of Congolese leaders decided that the ex-Belgian Congo should in future be called "the Federal Republic of Congo".

16. The Revolutionary Military Committee took over all Government authority in South Korea under the leadership of Army Chief of Staff, Lt.-Gen. Do Yung Chang. Martial law, curfew order and censorship were also enforced. Premier John Chung and the South Korean Cabinet were arrested the following day. Britain recognised the new regime on May 18.

After a delay of four days and a few minutes, the International Conference on Laos opened in the Council Chamber of Palais de Nations at Geneva with only 12 of the 14 nations present and one of the three Laotian delegations—pro-Western Boun Oum delegation—boycotting the session. Thailand and South Vietnam were the nations absent.

The Lebanese Premier, Mr. Saeed Salem, and his cabinet handed over their resignations.

A 40-year-old Manchester engineer, Mr. Dennis Davis and a sherpa Tashy climbed the Nuptse Peak (25,000 feet) in Nepal on which no man has ever set foot before.

17. The three delegations of Laos attending the Laotian peace talks in Na Mon (Laos) agreed in principle to the formation of coalition government.

18. India suggested at the Geneva Conference that study groups be appointed to examine East-West proposals for the settlement of the Laos problem. Mr. Menon said that a safety zone be established around Laos. He also denounced the

Soviet Union's plan for loading peace-making machinery in Laos with open and concealed vetos.

19. Eight persons were killed and 21 wounded, when the police opened fire at Silchar on satyagrahis agitating for the recognition of Bengali as an additional State language of Assam.

An agreement providing for collaboration of peaceful uses of atomic energy was signed in London between Britain and U.S.S.R.

20. President De Gaulle ordered an immediate cease-fire in Algeria to facilitate the crucial peace-talks which opened between the French Government and the Algerian Nationalists at Evian, about 20 miles from Geneva.

The South Korean Supreme Council arrested the ousted Prime Minister, Dr. John Chang and most of his ministers and appointed a 13-man military cabinet headed by Lieut.-Gen. Do Yung Chang, leader of the coup, to rule the country.

Uranium deposits were found in the Udaipur district.

A band of Afghan askaris attacked a Pakistan border post, but the attack was repulsed and the askaris retreated, leaving behind two killed and one wounded.

21. The 14-mile long Kathu canal was opened by Kashmir Premier Bakshi Ghulam Mohammed on the bank of the Ravi facing the Madhopur headworks.

22. Martial law was proclaimed in Alabama State after severe rioting broke out in Montgomery (Alabama) despite the intervention of U.S. marshals.

The President gave assent to the Dowry Prohibition Bill recently passed at the joint sitting of the two Houses of Parliament.

Prince Norodom Sihanouk failed in his attempt to bring the three princes leading the Chief political groups in Laos to Geneva for "Summit" talks on the formation of a united government.

The ruling military junta decided the

disbandment of all political parties and social organisations in South Korea.

24. The International Control Commission for Laos urged the immediate withdrawal of all foreign forces and military experts introduced into Laos since the Geneva Indo-China settlement of 1954.

25. King Hussein of Jordan married a 20-year-old English commoner, Miss Toni Averil Gardiner, who refused to be a princess or a queen.

The Governing Council of the U.N. Special Fund approved two training survey and research projects for India. The two projects are: "The Central Instructor Training Institute" at Madras, and, "The Institute for Petroleum Exploration" at Dehradun.

28. It was announced in Kathmandu that Sir Edmund Hillary's expedition without oxygen to Mount Makalu, the world's fifth highest peak, has been finally abandoned after two attempts to scale the peak had failed.

29. The two-day mid-year session of the All-India Congress Committee ended in Durgapur on a firm note that the Congress, as the party in power, is determined to take more effective steps for the defence of the northern frontier and to have Chinese aggression vacated.

30. The U.A.R. broke off diplomatic relations with South Africa.

An Indian Trade Commission was set up in Kuwait with Mr. N. K. Nigam as Trade Commissioner.

The all-African trade conference set up an All-African Trade Union Federation with headquarters in Casablanca.

D. H. Lawrence's novel, "Lady Chatterley's Lover", was declared to be "obscene literature" by Additional Chief Presidency Magistrate, M. Nassullah of Bombay.

31. South Africa became a Republic, left the Commonwealth and severed her 155-year-old ties with the British Crown. After Ireland and Burma, she is the third country to leave the Commonwealth. Governor-General Mr. Charles Roberts Swarts, became the first President and replaced Queen Elizabeth as Head of State.

Generalissimo Rafael Trujillo, dictator of the Dominican Republic in the Caribbean, was assassinated.

The Shah resumed full control of Iran after his European tour.

At the opening session of talks in Paris between President Kennedy and Gen. de Gaulle, a "general agreement" was reached on the problem of West Berlin.

An agreement was signed in New Delhi between the Government of India and the Burmah Oil Co. (BOC), a British concern, releasing about 1800 sq. miles to the Oil India Ltd. for further oil prospecting in north-east Assam.

Liberia ordered a political and commercial boycott against South Africa.

Ex-Generals Challe and Zeller who led the Algerian uprising were both sentenced to 15 years' criminal detention.

JUNE

1. A survey team of Geological Department of Gujarat Government discovered rich lead deposits in the Poshina area in Panch Mahals.

Northern Cameroon was handed back as an integral part of Nigeria.

2. Members of Aid India consortium, now generally called friends in need, held their final meeting in Washington committing aid to India totalling \$2.28 billion.

3. President Kennedy and Prime Minister Nikita Khrushchev met in Vienna to probe each other's minds about the problems their two mighty countries have created for the world.

4. Two hundred troops of the Tanganyika King's African Rifles flew into Zanzibar, where many people lost their lives in violent clashes between Africans and Arabs during the last four days.

The Governments of India and San Marino decided to establish diplomatic relations at the level of Consulate-General.

5. The Japanese Army uncovered a plot in Tokyo by "about a dozen" young officers aimed at overthrowing the Government.

6. Union Home Minister Lal Bahadur Shastri announced a solution to the Assam language problem which, he said, had secured the unanimous support of the Assam Pradesh Congress Committee executive and that of the Government of Assam.

Assam Government decided to sponsor an amendment to the official language Act to delete the provision which gave powers to Mahakemma Parishad in the Bengali-speaking district of Cachar to change the language of district administration from Bengali to Assamese.

The 20-nations preparatory "neutral-summit" conference opened in Cairo.

South Korea's ruling military junta promulgated a new provisional constitution giving it sweeping powers over legislation on the budget, military appointments and the cabinet.

7. Documents ratifying the air agreement between India and Czechoslovakia were exchanged in New Delhi.

A state of siege was decreed throughout Bolivia as a result of the discovery of a "communist plot to seize power".

8. At least 50 Akali leaders were arrested in different parts of Panjab in a swift move underscoring the Government's determination to meet the threat of a massive agitation for a Panjabi Suba.

9. The United Nations Security Council called upon Portugal to desist forthwith from repressive measures in Angola.

11. South Korea's National Supreme Council vested all powers in a seven-man standing committee headed by Gen. Pak Chung-hi.

Another oilfield of a substantial size was discovered in Kalol in Gujarat State. Thus the small town of Kalol, 15 miles north of Ahmedabad and 80 miles from Camba, leaps into fame.

12. The United Nations announced agreement with President Kasavubu of the Congo to bolster the Leopoldville Government's finances.

A quantity of 110 million tons of workable high-grade iron ore deposits were found in Mysore State.

The Thailand delegation walked out of the 14-nation conference on Laos in Geneva after a dispute over the seating of Right-wing Laotian political parties.

One of the biggest disasters in the history of civil aviation in West Asia occurred when a K.L.M. Royal Dutch airliner crashed off Cairo airport, killing 20 of the 36 men aboard.

The Government of India decided to locate the proposed plant for the manufacture of tanks at Avadi, near Madras.

The mid-term elections in Orissa gave the Congress a clear majority in the State Assembly for the first time since independence. Congress secured 82 out of 140 seats.

Pakistan lodged a protest with the

Afghan Embassy in Karachi against alleged aggression on the border.

13. The British Government announced a new constitution for its African colony of Southern Rhodesia.

APPOINTMENTS, AWARDS ETC.

(Continued from page 677)

VISITORS

Mr. Lyndon B. Johnson, Vice-President of U.S.A., and his party arrived in New Delhi on May 18, on a two-day fact-finding mission to India.

A North Korean trade delegation, led by Vice-Premier **Mr. Li Joo-Yun**, arrived in New Delhi on May 18.

Mr. Sardon bin Haji Julir, Malaya's Minister for Transport, accompanied by his wife, arrived in New Delhi on May 27 for a fortnight's tour of India.

OBITUARY

M. Francois Albert Buisson (80), French politician, writer, scientist, businessman, historian and politician, died in Aix-En-Provence (Southern France) on May 23.

India's greatest sports organiser and administrator **A. S. de Mello** died in New Delhi on May 24 after protracted illness.

Soviet Deputy Premier, **Mikhail Khrushchev** (60), died suddenly in Moscow on June 2.

Mr. Rathindranath Tagore (73), son of poet Rabindranath Tagore, died in Dehradun on June 3.

Mr. Balwant Singh Puri (70) a former secretary-general of the Indian Red Cross Society and St. John Ambulance Association, died in Poona on June 3.

Dr. Carl Gustave Jung (85), who pioneered the science of psychology with Sigmund Freud, died in his sleep in Kuesnacht (Switzerland) on June 7.

Lord Winster, former Governor of Cyprus died in Crowborough (Sussex) on June 8.

Prof. Jean Marie Guerin (89), the discoverer of the anti-tuberculosis vaccine, BCG, died in Paris on June 9.

Dr. K. S. Krishnan, National Professor of Physics, and Director of National Physical Laboratory, New Delhi, died in New Delhi on June 14 of a sudden heart-attack.

AUGUST 1961

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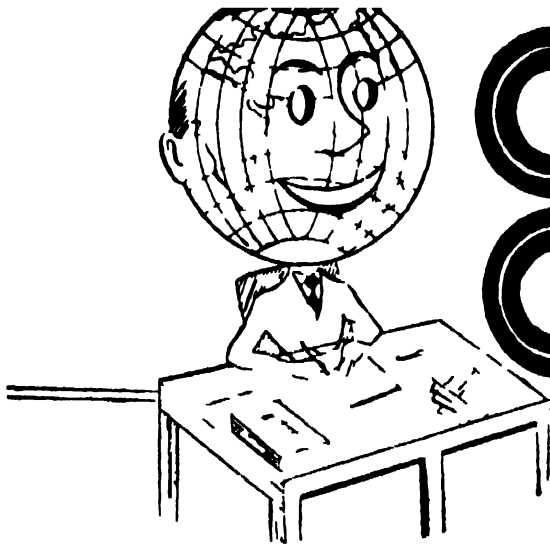
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EDITORIAL

TEN YEARS OF COLOMBO PLAN

July 1, 1961 marked the completion of ten years of the Colombo Plan. Ten years previously, on July 1 1951 the programmes of planned, cooperative economic development drawn up by Commonwealth and other countries in South and South-East Asia to promote economic prosperity and technical advancement in accordance with the purpose of the Colombo Plan took effect. Today ten years later the working of the Colombo Plan has gone a long way towards achieving the aims of its sponsors. Ten years is not a very long period for fulfilment of the ambitious programmes of the Colombo Plan but the results achieved in this short period more than justify the existence of this unique instrument of mutual cooperation. Ten years ago, the South and South East Asia where more than a quarter of the world's population is contained in only one-sixteenth of the world's land mass—was well known for its chronic poverty and economic backwardness. Now by the great cooperative enterprise embodied in the Colombo Plan the area has become fertile, productive and industrially prosperous. Dams and irrigation canals have been built to aid in production of more food and raw materials. Power stations, factories and new industries have been established. The living standards of the people have been raised and the lives of common people have been made better, healthier and prosperous. The diseases and epidemics have been eliminated and the death-rate has been reduced.

Speaking at a dinner at Lancaster House, London, on July 5, 1961, to mark

the Colombo Plan's 10th anniversary, the Duke of Edinburgh said: "In this age of cold war tension and international verbal slanging matches the Colombo Plan stands out as one of the few signs that sanity has not entirely departed this world. It has demonstrated that with the right inspiration and initiative it is still possible to influence the course of human events for the better, but perhaps most important of all it has built a bridge of mutual trust and cooperation between East and West. The bridge may be only a footbridge at the moment but if the Colombo Plan continues to attract the support and encouragement it deserves I believe we can improve the bridge till understanding and friendship replace all traces of hatred and suspicion to the lasting benefit of all mankind." The ten year work and achievements of the Colombo Plan rightly deserve this high tribute from such a great man as the Duke of Edinburgh.

The Colombo Plan was conceived at a meeting of Commonwealth Foreign Ministers held in Colombo Ceylon on 14th January 1950 a meeting that was called on the initiative of the late Mr Ernest Bevin, Britain's then Secretary of State for Foreign Affairs. The meeting was held to discuss the condition of the post war world in general and of Asia in particular. While reviewing the world problems and the economic needs of South and South East Asia at the meeting Mr (late Sir) Percy Spender, Minister for External Affairs, Australia stressed that the needs of South and South East Asia were far greater perhaps than those of any other part of the

world. He suggested that the Commonwealth countries should take the initiative in launching a programme of technical assistance to the region. The Spender Plan was based on the principles of self-help and mutual assistance. Simultaneously, the Ceylon Minister of Finance, Mr J. R. Jayawardene, produced a resolution calling for a Commonwealth Committee to prepare a ten-year plan of development for countries in the region. The two ideas were not immediately acceptable: the more advanced commonwealth countries were themselves engaged in economic recovery from World War II, and the Asian countries were concerned that "charity" might compromise their newly-won sovereignty. However, a decision was taken at the meeting to set up a Consultative Committee with the object of surveying the needs of the area, assessing resources of capital and technical assistance available and required, focussing world attention on the problem and providing a framework within which international co-operative effort could be developed to help the countries of the area to raise their living standards. The members agreed to meet again in four months' time in Sydney to discuss the Australian and Ceylonese ideas in detail.

The Consultative Committee met in Sydney in May 1950. It agreed that the countries in the South and South-East Asia should draw up development programmes to cover a six-year period beginning on July 1, 1951, and decided on a programme of technical assistance to help meet the shortage of technical skill and equipment in the area.

Four months later representatives of the United Kingdom, Canada, Australia, New Zealand, India, Pakistan and Ceylon produced a report reviewing the entire economic and development problems of the Commonwealth countries in the region as disclosed in development programmes which had already been prepared. This report might be described as a comprehensive attack on the problems of poverty and underdevelopment in the area as a whole. The report declared that the countries in the region "must be liberated so that they can contribute towards the self-realization of individuals towards the fulfilment of national aspirations, and towards the enhancement of the lives of other peoples throughout the world." This report constituted the "Colombo Plan for Cooperative Economic Development in South and South-East Asia": the

official name which was given at a meeting of the Commonwealth Governments held in London in September 1950.

The unique feature of the Plan is that financial and technical aid are given without 'strings'. Also each country works out its own needs and targets and makes its own bilateral arrangement with a member-country for specialized assistance.

The member countries in South and South-East Asia accept independent responsibility for carrying on their separate development plans, meeting annually with the other member countries in a Consultative Committee to report progress and discuss problems. The committee has no central funds and no executive functions. A small Colombo Plan Bureau in Colombo, with a staff of about 25 and annual expenses amounting to about \$57,000, keeps records of capital and technical assistance and promotes publicity about the Colombo Plan.

When the Colombo Plan was drawn up, those participating were the Governments of the Commonwealth Countries only—namely Australia, Canada, Ceylon, India, New Zealand, Pakistan and United Kingdom with the Federation of Malaya and Singapore, North Borneo and Sarawak as associate members. The sponsors of the Plan invited other countries in the South and South-East Asia to join in this great co-operative enterprise. Very soon all the countries of the area entered the Plan. There are now 21 members of the Colombo Plan. In addition to the above-mentioned countries, the other members are Burma, Cambodia, Indonesia, Japan, Laos, Nepal, the Philippines, Republic of Thailand, Vietnam and the United States of America.

The six countries outside the area—Australia, Canada, Japan, New Zealand, the U.K. and the United States—are known primarily as donor countries, coming forward with assistance for the development of the area. The distinction, however, between donor and recipients has receded for almost all the countries of the area are helping their neighbours in one way or the other in addition to drawing help from them and from member countries outside the region.

The Colombo Plan was first drawn up for a period of six years ending in June 1957. In 1955 its life was extended to June 1961 and at the Consultative Meeting in 1959 the Plan was extended until 1966. The

question of its further extension will be considered in 1964

Large-scale development effort needs equipment and services, technological skill and knowledge, most of which are in short supply in the under developed countries. Again, as development, especially the long-term development projects involve considerable initial expenditure without substantial immediate return it causes temporary balance of payment difficulties and shortage of foreign exchange.

The Colombo Plan takes cognizance of these problems and tries to provide assistance to the countries of South and South-East Asia to enable them to overcome the difficulties that arise in the implementation of their development programmes. The responsibility for national development and the major effort for its attainment are however of the countries themselves. They have to raise the necessary resources for implementation of their programme and make the necessary immediate sacrifices for ensuring a better future. Colombo Plan assistance supplements this national effort. The assistance rendered, therefore is generally of a marginal character to fill gaps in national resources to stimulate national effort and to speed up progress. No assistance is given unless it has been asked for and when it is given, there are no strings or conditions attached.

The forms of assistance broadly speaking, are Grants and loans for national development projects, Commodities including foodgrains, fertilizers, consumer goods, specialised equipment including machinery, farm equipment, transport vehicles, laboratory equipment, Services of experts and technicians and training in advanced technology to the students of the countries of South and South-East Asia.

The Colombo Plan Technical Cooperation Scheme operates in conjunction with the Economic Aid Programme. The Scheme aims at assisting the national government, of the area in overcoming deficiency of technical institutions and creating a body of trained men and women equipped with knowledge and experience of modern science and technology to undertake national development on a large scale.

The Technical Cooperation Scheme was started in 1950 with an £8 million Fund promised by the then member governments of the Scheme. The duration of the Scheme

is co-terminus with the Colombo Plan. All member governments of the Colombo Plan are members of the Technical Cooperation Scheme.

In providing technical assistance, the donor countries take into consideration the priorities of the needs of the area. For example, increase in food production and agricultural crops is one of the most important needs of the region. Technical assistance provided under the Scheme includes skilled services and equipment for controlling plant pests and diseases, preservation and storage of food grains and increase in production by the application of intensive cultivation methods and use of improved implements and better and more fertilisers. Reclamation of waste land is another field in which assistance has been given. Improvement of livestock and development of subsidiary foods through promotion of fisheries, sheep breeding and poultry are other spheres in which Colombo Plan technical cooperation has been effective.

Next to agriculture, industry and the basic services have been promoted. Technical assistance has been given in the construction of dams, canals, hydro-electric power projects, harbours, ports, bridges, highways, steel works, fertiliser factories, and extractive industries.

Welfare activities covering spread of literacy, promotion of health services and prevention and control of diseases are other spheres in which technical assistance has made significant contribution.

Since the inception of the Plan in 1950, more than 18,000 training facilities and about 10,000 experts have been made available to the countries of the area by members of the Colombo Plan. Special equipment worth £2.9 million, exclusive of United States aid in this field, had been supplied to the region, till June 1959, for training and use of experts. The total money value of assistance rendered is over £ (stg) 14.3 million. Assistance has come from Australia, Canada, Japan, New Zealand, U.S.A. and the United Kingdom.

With the progress of development some of the countries of the area are providing assistance to others. India is among nine such countries and has made available 1,007 training places and 30 experts. The other countries are Burma, Ceylon, Indonesia, Malaya, Pakistan, Philippines, Singapore and Thailand.

Concentrated development efforts of the member countries of Colombo Plan have already brought about some significant results. In spite of a 10 million increase in population annually, national income in the area during the last ten years has continued to rise at a slightly higher rate than the rate of population growth.

The food situation in most of the countries has improved. It cannot yet be said that they have turned the corner, as agriculture in the area is still largely dependent on natural rainfall. But the dependence on Nature is being partially reduced through provision of irrigation water which has received the first priority in the development programmes of many countries.

Many countries in the area have launched schemes to utilize river water. These multi-purpose projects, some of which have already been completed and others partially, have started supplying water to the fields and power for industry. Additionally, more land is being brought under cultivation.

Cash crops like tea, rubber, jute, coffee and coconut which are the principal foreign exchange-earners of some of the countries, have been considerably improved both in quality and production.

The countries of South and South-East Asia which are traditionally agricultural are acquiring a broader base for their economy through industrial development. While basic industries like steel, fertilizers and machine tools are receiving high priority, consumer industries are also receiving considerable attention. The industrial programme is being supported by research programmes. Fundamental research institutions have been set up and the results of their research are being carried to the fields and factories through extension workers.

Social services are being augmented; greater protection has been given against killer diseases like typhoid, cholera and smallpox. Malaria has been reduced in many countries. To control tuberculosis, B.C.G. vaccination on a mass-scale has been organised in several countries. Rural health and environmental sanitation are receiving special attention under the Community Development Programmes.

Literacy has advanced; more children are going to school; adults are also becoming literate. Education is receiving a vocational bias and more and more people are

being trained in modern technology to undertake national development on a larger scale.

These are some of the outward manifestations of the "change" that is occurring in South and South-East Asia. Although some of the results that have obtained are significant, they represent only a beginning.

One of the most significant features of mutual aid under the Colombo Plan is that the dividing line between donor and recipient countries, which was rather sharp at the beginning of the plan, is now gradually getting less marked. India now occupies a position of considerable importance as one of the countries giving assistance. She has provided training facilities for about 40-50 students and officials from the member-countries such as Burma, Ceylon, Indonesia, Malaya, Philippines and Thailand. Graduate and post-graduate courses in subjects like agriculture, veterinary science, dairying, soil conservation, fisheries and agricultural extension are open to them. India has also arranged for study and observation tours for officials from other member-countries.

Apart from training facilities, India has made available the services of her experts for assisting other countries in their development programmes. Such experts have been provided for forestry, potato growing and tractor engineering.

The Colombo Plan has become the finest experiment in international cooperation and partnership, an experiment which links together highly industrialised countries and primary producers. It has fostered among the less developed countries of South and South-East Asia a sense of mutual cooperation and understanding. For the common people, for political thinkers and administrators, the Colombo Plan will continue to be a powerful means for the relief of want. It is symbolic of man's attempt to share the uses of science and technology for the benefit of all. Sir Percy Spender, the man who conceived the original idea of the Colombo Plan, has said: "The achievements of the Plan are a guiding light in a troubled world for they are eloquent of what may be done by human understanding and a desire to help. . . . the Colombo Plan is an experiment, an amazingly heartening experiment in human goodwill and understanding."

What Is Culture?

By SHRI K. M. MUNSHI

(This article is a condensed version of a lecture delivered at the National Academy of Administration, Mussourie, where candidates selected for I.A.S., I.P.S., I.F.S. and other services are trained, by Shri K. M. Munshi, when he was Governor of Uttar Pradesh —Ed. C & C.)

Whenever I write about Indian Culture, my mind goes back to the early years of this century. I was then in the college and came under the influence of John Stuart Mill and Herbert Spencer. We thought ourselves 'progressives' only when we looked down on our ancient heritage, and looked up to whatever came from the West. Even our great Epics, the **Ramayana** and the **Mahabharata**, about which we knew quite a lot from our childhood, came into disrepute with us. The Mission Houses, through their little books, told us that those of us who drew sustenance from these Epics were no better than savages!

Then I made a little study of history, read some of our scriptures and began to see life through experience.

The question that slowly began to confront me and that insisted on being answered was: 'How was it that Indian Culture had survived when so many ancient cultures in history had withered away?'

We then read of the gentlemen of Greece and of Rome; of the glories of Egypt and Persia; but all of them had become museum-pieces. On the other hand, how was it that the vitality of Indian Culture had continued through the ages despite historical vicissitudes? Why?

I know how difficult it is to vitalise our roots in the soil. Today few of our educated young men are given a living faith in our great past through any influence at home. Our university education has also been depriving them of an insight into our culture. The enthusiasm for the study of Sanskrit is waning fast; the study of ancient Indian history is almost neglected.

We should learn to view life from a historical point of view before we can realise the value of culture. While history is the story of integration and disintegration of human aggregates, culture has been the greatest integrating force in man.

To start with, therefore, let us be clear about the meaning of culture. If there is one word which has been widely misused

during the last fifteen years it is the word 'culture'. Dance and music are 'culture'; jazz and rock-'n-roll is 'culture'. In cities like Delhi and Bombay, cultural shows are performed every day, none of which has hardly any element of culture; often, they are characterised by a want of it. There are also cultural exchanges between nations, the object of which is to deprive us of our culture and to spy upon our country.

Culture is not civilization. If I may repeat an apt illustration which I have often given, Sri Ramachandra and Sita went about in a canoe; we move about in giant airlines. They put on bark clothes and walked on foot; we have nylons to wear and giant airlines to travel in. Our material equipment of life is decidedly better, more complex, physically more comfortable than that they had. But he would certainly be a bold man who would say that he has more of culture than Sri Ramachandra or Sita had!

The dress we wear, the factories we set up or the dams we build, are only a part of the 'civilization', the material equipment of life, which tends to increase in complexity with scientific progress. But essentially culture has little to do with material equipment of life. It is the characteristic way of life inspired by fundamental values, in which a people live. It is the sum total of the values expressed through art, religion, literature, social institutions and behaviour, the over acts of individuals and mass action inspired by collective urge.

Mere geographical contiguity does not imply homogeneity of culture. In Africa, for instance, there are different peoples with varying traditions, social systems and form of conduct. It will, therefore, be a misuse of the word to say that there is an African culture.

What then constitutes culture? Its first characteristic is continuity. It comes from the past, adjusts itself to the present, and moves forward to shape the future. The division of culture in relation to time does

not, therefore, give a true picture of what it really is.

A culture becomes a flowing stream only when there is continuity of collective life in a people. In other words, a distinctive culture comes into existence when a people develop a continuous way of life. Such continuity expresses itself in various ways; in common traditions and forms of conduct; in common institutions, in a common memory of triumphs achieved; in a common aesthetic outlook; in a capacity for characteristic collective action.

If there are no common traditions, no common culture can come into existence. Nor is a common life possible without common forms of conduct approved by the thinking minority and generally accepted by the people.

Norms of Conduct

For instance, wherever we go in India, we find certain forms of conduct accepted by a large section of the people. There are lapses no doubt, but they are considered a departure from approved conduct even by those who are guilty of them. If, for instance, we talk of a woman being as good as Sita in any part of India, most persons will understand what we mean and accept the validity of the test. It is true many women in actual practice do not act like Sita but the good women will be expected to conform to the pattern of conduct prescribed by that ideal.

Again, people, in the course of developing a distinctive culture, give a uniform shape to their basic social institutions. If, for instance, basic institutions of a people like marriage or the family have no common outlook of purpose or ideal, their culture will have no distinctiveness and no continuity.

Further, for a people to have a vital culture, it is necessary that they should have a vivid memory of having achieved common triumphs in the past. Whether the triumphs are mythological, historical or imaginary makes little difference, but they must be closely woven into the collective consciousness of the people.

Co-existence

Geographical co-existence of two communities within well marked physical boundaries may foster the development of common culture, but by itself it is not an indication of the existence of a culture. If

Hindus and Muslims in India cannot look back to the memory of common triumphs and if one looks back with pride to Shivaji and Rana Pratap and the other to Moham-mad Ghazni and Ibrahim Lodi, no common culture can exist between the two.

I want to make it clear that all cultures need not possess all these characteristics in the same degree at the same time. In some period of time one or the other of the characteristics may be more pronounced than the rest in the same people; but most of them must be present in some form or the other to give vitality to a culture.

Common Outlook

The most important characteristic of a vital culture is a common outlook among the people which, when faced with difficulty, resistance or adversity, can generate a collective will to action. In other words, the vitality of culture can be measured by the capacity of the dominant minority, and following it, the majority of a people, to offer collective resistance in a characteristic way. However, they cannot do so when the collective will to resist adverse circumstances is weak; then the culture becomes decadent and the people begin to disintegrate.

When all these characteristics, traditions, forms of conduct, institutions, memory of triumphs achieved and the collective will to action give power to a people to will themselves into a unit, their culture, as an integrating force, opens out a destiny for them.

An extraordinary phenomenon has occurred in the world during recent time, illustrating the virility and strength of a vital culture. Before World War II, Jews lived in many countries all over the world in ghettos and in concentration camps and had for centuries been subjected to inhuman persecution and sometimes to mass murder. During the World War II, sixty lakhs of them were burnt alive in Nazi camps. In spite of this savage persecution and mass massacre, they had built their life on common traditions and vivid memories of achievements of their ancestors glorified in the *Old Testament*.

Impelled by a collective will to action, these Jews migrated from 73 countries to Palestine. Inspired by the vivid memory of the 'Promised Land', given to them by Jehova three thousand years ago, these

men and women—barely a million—worked, suffered, fought and died to build a new Israel. They converted deserts and swamps into a land of trees and flowers and farms and by rare heroism developed defensive might.

This provides the most brilliant example in history of the collective will generated by a common tradition and common memory of achievements, ancient though they were.

Fundamental Values

When we study the vitality of cultures, we find that all these characteristics are correlated to each other by certain fundamental values springing from a Central Idea which has the power to replenish their vigour.

With the passage of time environment changes, civilization alters its content, new disintegrating factors arise. When these phenomena become pronounced, a new age comes, and society, with it the culture, comes under the pressure of a new crisis. When such a crisis arises, the best among the dominant minority of the society are faced with a new responsibility. They have to accept the challenge; adjust their outlook to it; adjust their norms of conduct and basic institutions—but in the light of the fundamental value of their own culture and under the inspiration of its Central Idea.

This Central Idea drives the stream of culture forward between the banks of Time, changing its course, throwing up formations, leaving behind weeds, meandering or roaring according to the conditions imposed by the pressure and material equipment of each section of time. When the conditions change, new wave crests are formed. But in its essential unity, its characteristic elements and its direction, it remains the same. When the Central Idea drives and inspires the way of life no more, the culture dies and with it die the people.

Present-day Greek

Take for instance a Greek of today. Though he lives in the same land, there is nothing in common between him and the Greek who lived in the times of Pericles. The fundamental values which prompted the life of those Greeks simply do not exist for him. We will, therefore, be justified in saying that the culture of ancient

Greece died the day the representative of Greece did not find fulfilment in living up to the values of the Greek culture.

Similarly the culture of Ancient Rome died when its society was overwhelmed by the presence of foreign slaves and mercenaries from Gaul and Germany, and the best among the Roman youths ceased to worry about the values cherished by his ancestors which had made Rome the master of the world.

Role of Minorities

We thus find that culture can live only if the dominant minority in the culture group plays its part. In politics, the vote of a man on the verge of insanity is as good as that of the wisest. But in human affairs, it is the thinking and active minority, which Toynbee calls the 'dominant minority', that counts. If alive to the dangers of disintegration, it alone can develop the inspiration, courage and the vision that makes for the community's vitality, power and influence.

The values of a culture are recaptured for each generation by a subtle process of re-interpretation, re-integration and adaptation. When the culture is living, the promising young man and woman of the generation receive the impact of its fundamental values. The sensitive and the vigour, among them become each a human laboratory which absorbs the fundamental values relating them afresh to the Central Idea: stimulates them to meet the needs of the times: reintegrates the subsidiary values with the fresh vigour of the new interpretation and shapes the traditions and institutions without impairing the strength of the collective will.

Suppose a time comes in India—God forbid—when our young men and women are lost to the values and ideals of our culture, our culture would be dead. They may be civilised, barbarians or second-class Westerns, but they can never be the torch-bearers of a living Indian culture for the age in which they live or for the future.

A sound mind in a sound body, is a short but full description of a happy state in this world. He that has these two has little more to wish for: and he that wants either of them will be little the better for anything else. —John Locke

The Role and Status of Teachers

By Prof. N K. SIDHANTA
Vice-Chancellor, University of Delhi

The aims and objectives of University education have been outlined in numerous volumes by various writers. Twelve years ago our University Education Commission summed up these objectives as:—

“(1) Transmission of the intellectual and ethical heritage of humanity to the young;

(2) Enrichment of this heritage and extension of the boundaries of knowledge;

(3) Development of personality.”

The teacher is the instrument for the achievement of these aims and he has to be equipped with certain intellectual and moral qualities to be able to perform his task adequately. The first of these is that he must know his subject which means he must continue to learn all the time to keep pace with fresh developments. He cannot do this unless he likes his subject and enjoys keeping abreast of the new publications bringing to him the ideas of the most recent thinkers. If he has to stimulate the interest of his pupils he must himself be genuinely interested; it will not do for him to be hypocritical and simulate an interest where none exists. Therefore the good teacher has to plan his career far ahead of his entry into the profession: when as a senior student he is choosing his special field of study he has to examine himself carefully and understand his reactions to his study of different books and subjects. Next when he becomes a teacher he has to plan his work, specially in the early part of his career, carefully choosing the themes of his lectures and the topics for discussion with his pupils; but to this I shall return later.

This implies that the teacher must like his pupils, he must enjoy the company of the young, he must understand the defects of youth, ignorance and shallowness, and attempt to eradicate them. This can be best done when the teacher has his pupil singly and faces him individually; but unfortunately this is becoming more and more difficult on account of the influx of increasing numbers in the universities. During the first nine years of independence the enrolment in Indian Universities was more than doubled: it rose from 3,22,000 to 7,69,000. Here we cannot go into the rea-

sons for this rapid increase, for the growing keenness for University education and for the admission of large numbers without adequate preparation. But the fact remains that these large numbers have been admitted and during the last year the enrolment has been in the neighbourhood of a million. The recruitment of teachers has not kept pace with the enrolment and the teacher-pupil ratio which should have been improved during these years has, on the contrary, deteriorated. In 1948-49 16,244 teachers used to look after 322,883 pupils; in 1956-57, 36,504 teachers had to do for 769,468. During the first three years after independence the teacher-pupil ratio improved from 1:20 to 1:18 but it has now gone down to 1:21. On further examination, we find that the conditions in Arts and Science subjects are very much worse than this, as the total includes professional colleges where the number of pupils per teacher has to be small while the pupils are carefully selected. We are far away from Nalanda where for 8500 students they had 1500 teachers, but we have a right to expect something better than the present state of things.

One point which we have to note in this connection is that it is difficult to attract the larger numbers to the teaching profession, especially on account of new avenues of employment under the Government and in the fields of business and commerce. There are properly constituted selection Committees in each University and these Committees generally include experts in the subjects chosen from outside. But their choice is restricted because qualified candidates are few:—for the Professorships and Readerships in some subjects there are very few qualified candidates available. One reason for this is the scale of emoluments offered to University teachers. In 1949 the Radhakrishnan Commission had recommended the following grades for University teachers:—

Professors	: Rs. 900-50-1350
Readers	: Rs. 600-30-900
Lecturers	: Rs. 300-25-600

Since then the cost of living has gone up progressively and the purchasing power of the rupee has gone down. Yet with all

efforts of the University Grants Commission the emoluments to-day are lower than what was suggested 11 years ago: in real terms they are very much lower. Conferences of educationists have suggested improvement of these, not only in absolute terms but also relatively that is, in comparison with the salaries which are offered by the Government of India or the business houses in the big cities. The Central Pay Commission has recommended for Class I Officers a Junior scale of 400 to 1000 and a senior scale of 9000 to 18000. In the commercial houses of Calcutta and Bombay the grades are appreciably higher than this. No wonder that the student who has done well in his Final Arts or Science examination first tries for one of these and when he fails to obtain a berth under the Government or in business he turns to Teaching as a last resort without giving up the hope of migrating from the profession at the earliest possible opportunity.

This implies there can be no careful planning of the would-be teacher's career and work. He has been driven into the fold and has to adjust himself to his profession and learn to perform his duties as best as he can. While the teacher in a primary or secondary school has to undergo a period of training before he is considered to be qualified to teach, the young Lecturer has no such opportunities or obligations. It is held that the college teacher must have a quantum of knowledge which he acquires in the course of his education for a Bachelor's and Master's Degree; if he wants to mature his intellect he takes up Research work on a specialised branch of his subject and tries to extend the boundaries of knowledge. He can then take up his teaching work conscious of being intellectually superior to his pupils and trying to bring them up to the standard he has attained. But possession of knowledge is not enough: it has to be communicated to groups of pupils of different intellectual levels. The art of communication through lectures, tutorials or repetitive lessons is not ingrained in the young teacher: he has to acquire it through trial and error at present: he might be able to avoid a good amount of trouble by going through a course of professional training. In lecturing, for example, the beginner tries to cover his nervousness through fluency: he

tries to emulate the platform orator by rattling off what he has to say at a reckless speed. If he is held up by his pupils who want to retain the points of the lecture in the form of notes he may degenerate into the note-dictator and the preparation of answers to possible questions for the public examinations. The art of the good lecturer is in careful preparation of his materials and of his delivery which includes variation of speed in different parts, modulation of voice, pause and use of the black-board and numerous other devices which the teacher now acquires after years of effort and in which he might have been trained through a course in a professional institution.

What is true of the art of lecturing is equally true of the art of the tutorial. The method of tutoring may vary with subjects and individuals but the principle is almost always the same. The pupil prepares same work by himself and takes it for correction and criticism to his tutor who goes over it thoroughly, criticising the outline and the execution down to the smallest details. The pupil becomes mature through having to do work on his own and having to defend what he has written in replying to the tutor's criticisms: he learns to create as well as to criticise. The debt which the pupil owes to his tutor is great but it is not always remembered: I for one, have never paid the same tributes to my Cambridge tutor as to some of the brilliant lecturers who attracted crowds of students: yet, after many decades, I can assess the intellectual gain from the former who had mastered his art through work with generations of students.

But to return to the point of preparation and training. The teacher must have a singleness of purpose, that of influencing the mind of the comparatively immature: he must have a pride of achievement if he is able to evoke response and survey progress. The two faculties which help the teacher to success are memory and will-power: both of these can be carefully cultivated, the latter to a greater extent than the former. But the essence of the matter is that the teacher must be proud of his vocation; he must be conscious of the greatness of his task. We are fond of looking back to the past. If we do so, we find that in the Upanishadic days the pupil looked up to the preceptor as his father:

the teacher, on the other hand, was to have "the highest moral and spiritual qualifications." The **Mundaka** enjoins that he is to be well versed in sacred lore and he must teach his pupil the exact truth as he knows it. The **Taittiriya Aranyaka** emphasises this that the teacher must concentrate all his energies on his work and the **Shatpatha Brhmana** requires him to reveal all his knowledge to his pupil. He was the leader of society as he was responsible for the preservation of culture through the propagation of knowledge.

Can we affirm this of the teacher of today? Can we say that he impresses his pupils today as he used to do even half a century ago? Without indulging in sentimental regrets for a dead past, without investing it with a halo of false glory we have to say that the teacher today is not the object of love and reverence that he was in former days. Several reasons have been assigned for this. One is that in an age of democracy, in an era of the common man, the spirit of hero-worship has faded away. God loves the common man: otherwise he would not have created so many of them. The teacher on a pedestal adopts a pose of superiority and the greatest pleasure is derived from the debunking of the spurious specimens and there are far too many of them. If there are any gods in this set-up, they are of the marketplace and the genuine teacher does not attempt to emulate them: he prefers to retire within his shell which means that he does his work without any zest. If he is not loved and admired by his pupils he does not attempt to come too near to them and the genuine interest in youth which we have found to be an essential concomitant of excellent teaching gradually disappears.

In our big cities where most of our universities and colleges are situated we come across another unpleasant phenomenon. In the economic sphere with the process of creeping inflation threatening to become a galloping one, pecuniary emoluments have acquired greater importance than they used to have at least with the intellectual minority. Man does not live by bread alone: we need not counter this by saying that he needs butter as well: but we have to acknowledge that he cannot live without bread. In the populous University centres the teacher is in danger of going without this as also without a shelter above his

head or the wherewithal to satisfy the mental, emotional and material needs of the members of his family. To satisfy these needs he has to take recourse to means of increasing his income which do not enhance his prestige. As it is, the new leaders of society look at the teacher with some amount of contempt because of his lack of material success: they now seek justification for this with a reference to the teacher's struggle for a livelihood.

If the teacher has to be rehabilitated so that he may perform his duties satisfactorily the lost respect for the teacher has to be restored through the united efforts of the Government and these new leaders. It will not do to say that the teacher must first deserve it: here we cannot say which process must come first. What we can emphatically assert is that if the University is to function properly it has to depend on the teacher vividly aware of his mission. In the words of the Radhakrishnan Commission, "The factors which are responsible for the demoralization and denigration of the teacher must be removed and a healthy atmosphere restored. For the teacher is the cornerstone of the arch of education, he is no less if not more than books and curricula, buildings and equipment, administration and the rest." (Courtesy: 'A.I.R.')

AN IDEAL TEACHER

"A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame. The teacher who has come to the end of his subjects, who has no living traffic with his knowledge, but merely repeats his lessons to his students can only lead their minds. He cannot quicken them. Truth not only must inform but also must inspire. If the inspiration dies out and the information only accumulates, then truth loses its infinity. The greater part of our learning in the schools has been a waste because, for most of our teachers, their subjects are like dead specimens of once living things with which they have learned acquaintance, but no communication of life and love."

—Rabindra Nath Tagore

Powers of the Union Government

By SHRI P. N. SAPRU

This country has a federal or, to be more accurate, a quasi-federal Constitution. It envisages a Union Government as also State Governments. It provides for a Union Parliament as also State Legislatures. Some of the State Legislatures have two Houses; others have only one. The Constitution thus is similar in principle to that which obtains in federal countries like Canada and Australia except in the sense that its provisions disclose that it has a greater unitary bias than even the Canadian constitution.

No Guarantee

In a federal constitution as there are two Governments in the country responsible to the Union and State Legislatures respectively there can be no guarantee or certainty that the party which holds power at the Union Centre will also be returned to power in all or even some of the States. Though we have national parties, and it is an advantage to have them, the average voter might well prefer one party for the Union Centre and another for his State. States have to concern themselves with day-to-day administration and those questions that touch the common man. The execution of plans formulated by the Union Centre is, largely speaking, their task.

In a situation like this it is quite apparent that there can be legitimate difference of opinion among voters as to whether the party in power at the Union Centre should also be the party which holds the authority in the States. In Canada, Australia and the United States and even in Switzerland it very often happens that the party in power at the Union Centre does not find itself in a majority in a State Legislature. Government has to be carried on and therefore there is an understanding that State politics must be kept distinct from that of the federal Centre.

Difficulties have sometimes been experienced even in these countries in working a federal constitution. For example, in Australia there was a conflict between the Commonwealth Centre and the State Government of New South Wales under Mr. Lang in 1934. Such conflicts are unavoidable. They are inherent in a federal system and add both vitality and, paradoxical as it may seem, weakness to a federal Government.

It may sometimes happen that the Government of a State cannot be carried on in accordance with the provisions of the constitution. Anticipating difficulties such as this, our constitution-makers have given the power of even suspending temporarily the Constitution to the Union Centre. No such power is enjoyed by the Central Governments of Australia, Canada and the United States. This provision vests the Union Government with vast powers of what may be called temporary overlordship over the State Governments. In a country such as ours, where regional, linguistic and communal feelings still play a large part in determining administrative policies, a provision of this character must be regarded as a welcome feature of the Constitution.

Responsible Government means Government of the majority party in the Legislature. This, of course, does not give the Government the right to ride roughshod over minority parties. Quite clearly, it is possible under a constitution such as ours that no political party has an absolute majority in the Legislature. This has happened in our country in some States, notably in Kerala where there was a Communist Government in power functioning with the support of a few independent members. The Union Centre had to intervene because, according to it, the Government of the State was not being carried on, even though it had a majority in the Legislature, in accordance with the provisions of the Constitution. In Orissa no party had a clear majority. In these circumstances, President's Rule was clamped down on the State.

Caretaker Government

The right of the party in power, even though it be in a minority, to demand a dissolution of the Legislature cannot now be disputed. It is well known that Mr. Ramsay Macdonald's Labour Government in 1924 was a minority Government. The Labour Party was not even the largest party in the House of Commons but as the Liberals were not prepared to support the Conservatives it had to assume the responsibilities of Government. Even so, after nine months of trial, Mr. Macdonald decided to appeal to the electorate with results which were not too favourable for the Labour Party, for the Conservatives came

back to power with a good working majority. Reference has been made to what happened in Britain in 1924 to illustrate that the Prime Minister, even if his party is in a minority, has a right to ask for a dissolution. If we look upon President's Rule as a sort of caretaker rule ultimately leading to a mid-term election, it can be argued with force that it is, under our State Constitution, for the Chief Ministers to decide whether they shall have a General Election and pending that to seek the Union Centre's intervention to form a caretaker Government by suspending the Constitution.

Secular Party

But such eventualities should be avoided as far as possible. It should be possible in situations where no party has a clear majority for different parties to form coalitions based upon mutually-agreed programmes. The dominance so far of the Congress Party in the country has prevented, to a large extent, coalition Governments which are inherently weak but the continuance of the existing state of affairs cannot be taken for granted. On the assumption that the Congress Party represents a non-Communist leftist element in our politics, it should be possible for it, where it is not in a clear majority but is nevertheless the strongest single group in the Legislature, to work out programmes in implementing which it can obtain the co-operation of other non-Communist leftist or left centre groups to give a State a stable administration. This experiment is being tried in Kerala and it is of vast significance for the future development of politics in this country.

What both the Union Government and the State Governments have to remember is that a federal Government is a vast co-operative enterprise which cannot function without the goodwill of both the Union and State Governments and peoples. It is fortunate that we have in this country a secular political party with the prestige of the Congress to provide a stable element to our constitutional structure. The very position occupied by the Congress Party makes it necessary that coalitions with national-minded and Socialistic groups based upon agreed principles and programmes should not be ruled out where the Congress, for one reason or another, fails to obtain an absolute majority. What should be avoid-

ed, however, are groupings on caste, sectarian or communal lines.

A feature which distinguishes our Constitution from those of other federal constitutions is the power which it gives to the President i.e. the Union Government to take over by proclamation the Government of a State where he is satisfied that a grave emergency threatening, whether by war or external aggression or internal disturbance, the security of the country is found to exist. It further authorises the President on receipt of a report from the Governor of the State to assume to himself all or any of the powers of Government of the State excepting those exercisable by a High Court where he is satisfied that the Government cannot be carried on in accordance with the provisions of the Constitution. These provisions place serious limitations upon the autonomy of State Governments; they are clearly intended to be used in those extreme cases where the political party in a State is subverting its democratic character and giving it a totalitarian turn.

No Superior

The Founding Fathers felt that the Union Centre could be trusted not to go the anti-democratic way for there is no provision, enabling the Union Constitution to be suspended when it too is being utilised to build up a totalitarian pattern. In the very nature of things, no power superior to that of the Union Government could be set up without grave danger to democracy itself. Both extreme regionalism and communalism are against the spirit of the Constitution and clearly the Founding Fathers were right in assuming that the Union Centre would be comparatively free from these dangerous tendencies.

Democracy is yet in its infancy in this country; it needs to be protected from disruptive forces and we have to be constantly on our guard against tendencies which make for totalitarianism of the right or the left. The emergency powers vested in the Union Government in no way constitute a denial of democracy; rather they correctly envisage the conditions under which alone it can thrive. There are far too many fissiparous tendencies; without strong Central direction and control they can constitute a real danger to the integrity of this country. (Courtesy: "Times of India")

A PLEA FOR USE OF ENGLISH

By REGINALD MASSEY

English or no English—that is the question. If no, how best to get rid of it? If yes, how much?

Admittedly, the problem is complex, and much has been already said on it. Arguments have been bandied about, commonplaces exchanged, dust raised; and I daresay, the confusion thereby increased. For the fact of the matter is that when one speaks of language, it is rather difficult to be objective. The intellectual from Calcutta believes that his tongue—the tongue of Tagore—is incomparable. The man from Banares can produce some cogent advocacy for Hindi, but the man from Madras still swears by his beloved Tamil. There are a lot of other folks also, from places as far apart as, say, Lucknow, Ernakulum, Amritsar and Ahmedabad, who have different points of view. To each his own. And I think that they are all correct? But the trouble is that they're correct only from their own particular angle. And angle views, by the nature of things, are necessarily limited.

Each language has its own particular and unique merits, as also its own particular and unique demerits. For example, the peculiar rhythm of Urdu for the recitation of poetry is absent in other languages. But the harmony in Bengali is almost musical, thus making the folk songs of Bengal the best in India. So, though a group of Santiniketan singers would carry you away on a boat-song—no Bengali poet could electrify you with his verses as a Firaq can. And then again, which language in India can express better the very humour of the soil than Punjabi? I therefore repeat, to each his own. But each holds its own only within a small sphere of usability and utility.

The Only Answer

I hence make the following sweeping statement: If we are to have a united India, a decent standard of education and science, and a respected place among the nations of the world, English and only English is the answer. A universal and wide adoption of English is called for immediately. Certain stark facts in support of the above are placed before the reader in the succeeding paragraphs.

India is today threatened by multifarious forms of disintegrating processes. The

language racket is one of them. I call it a racket because unscrupulous politicians are whipping up mass emotions based on pious cant, falsehoods, and what is worse, half-truths. Some raise the slogan supposedly for the Gujarati and others raise it supposedly for the Tamil. And still others raise it supposedly for the Naga! It's about time that some voice somewhere raised a little squeak for the poor Indian. India, as a compact united whole, cemented by a single language and a single script is what we direly need. I really wonder how many people seriously think about this obvious requirement.

To my mind there could be only two possibilities for a national language: Sanskrit or English. Sanskrit is the mother of the Indian languages. But as it has been dead for so long it's difficult to revert to it at this late stage. That leaves English. It is the only common language left to us today; it has had a long and illustrious connection with India, and it is the only compromise formula between North and South.

Moreover, if Sanskrit is the mother of the Indian languages, let us not forget that Sanskrit is also the mother of English. For it has been conclusively proved that Sanskrit is the root of all the Indo-European languages. Therefore, I fail to see how we compromise our cultural heritage in any way by the use of English.

I believe that the study of Sanskrit is nevertheless necessary; we have neglected our classical language for too long. That is why we face a cultural bankruptcy today. Latin and Greek are compulsory subjects in European schools, that is why there is some sort of cultural integration in the West. But how many of us Indians know our classical language, the oldest classical language in the world?

Basis of Unity

We require English to provide the basis of political and national unity and Sanskrit as the basis of our common culture. At this the regionalists and disintegrationists will show their fangs and shout, "What about our Assamese?" "What about our Telugu?" "What about our Marathi?" etc.; etc. Their cries will have the familiar tones of, "Islam is in danger?" To all this of course, the modest answer would be,

"India is bigger than Assam or Andhra or Maharashtra."

For India as a whole, the following system would be ideal:—**From primary to middle stage:** regional language as the medium of instruction with English as a compulsory subject.

From middle to higher secondary: English as the medium of instruction with Sanskrit as a compulsory subject. The regional language is here dropped both as a medium of instruction and as a compulsory subject, but may be offered as an optional subject.

University: English as the medium of instruction; and for arts students up to B.A., Sanskrit one of the compulsory subjects. At the university level also the regional language may be offered as an optional. Thus the regional language will play a relatively small part in the average graduate's education; and that, I believe, is what must be.

Throughout India there is unanimity at least on one score; the lamentable fall in the standards of education. As one who has been humbly connected with education, I stand convinced that this fall in standards has only one cause. That sole cause is the sad neglect of English studies during recent years. We know too well that knowledge of any subject of any advanced level, be it economics or physics or geography, can be imparted effectively only through the medium of English. And what do we do? We wilfully undermine the students' grasp of that language at the school stage. So that it is little wonder that at college-level they fail by the thousand every year, as they simply cannot understand the ideas or the instruction imparted. Perhaps this large percentage of failures helps the "paper-making industry" by that pernicious practice of "supplementary examinations". But that is its only merit.

Fit Media for Instruction

It is wishful thinking on the part of those innocent people who piously hope that some of the Indian languages are fit media for higher studies. It is painful, but true, that no Indian language is sufficiently developed today for the purposes of advanced instructions. Specialists are needed in every branch, be it commerce or science or art. And the greater the special-

isation, the greater the requirements of linguistic precision. None of our languages have reached that stage, and I think that they never will. For while you are wasting your time and energy finding technical equivalents in Hindi, let me assure you that thousands of new terms and technical advances would have already been made during that self-same period. Which simply means that you will always be working at a disadvantage.

Some time ago, education in this country had a good standard. Bombay, Calcutta, and Madras Universities have reputations to be reckoned with. They turned out graduates of calibre who could hold their own against any foreign graduate. They produced men like Tej Bahadur Sapru. Men from the Indian universities went to Oxford, Cambridge, Berlin and London and snatched the top honours. But today? An Indian degree has become a joke. The Indian graduate has about the same level as a school-leaver in Britain. And I fear that within ten years his standard may fall lower. This is very likely to happen if our misguided nationalists and narrow regionalists have their way.

Experience has proved that the moment Hindi or any other regional language was taken as the medium of instruction the standards immediately fell. Observe the fiasco at the U.P. Universities, the classic case of Gujarat, and, more recently, the Tamil adventures at Madras University. Raja Ram Mohan Roy and the leaders of the Indian Renaissance knew what they were about when they insisted on the mastery of English both at school and college. Those who control the universities must realise the utter tragedy of the situation. We can understand the politician's attitude for he has his eye on the next election. The teacher is concerned with the generations. In the year 2000, 39 years hence, it is the leaders of education today who shall be held responsible for the malaise. I make this statement both as a challenge and as a sombre warning.

Debt to English

We have an honoured place among the nations of the world; this is largely due to our good fortune in having men like Nehru and Krishna Menon who have the ability to use the English language forcefully and effectively. Look at history. One wonders

what a Tilak, or a Sarojini Naidu, or a Motilal Nehru, or even a Mahatma Gandhi would have achieved without the great command of the English medium. Tagore himself was indebted to English, for it opened him to new fields, advanced his internationalism, and above all gave him yet another avenue for the expression of his genius. One feels a little ashamed to meet a German who teaches Pali to Indians. But it warms your heart to meet a Punjabi girl who teaches English in Italy, or to read that a young Indian wins a literary award in London, or to know that another Indian heads the English Department at a West Asian university. Perhaps Gladstone was envious, but he did say that the best English he ever heard was from the mouth of an Indian!

We are indeed lucky that we find ourselves in contact with the most important world language. Two of the three world Powers speak it. It has the most developed literature, the most flexible usage, the fastest expanding vocabulary. In the entire history of civilization there has not been another language in which so much was ever written. Both in the quantity of thought and in the quality of style it is unrivalled. I repeat that we are indeed lucky. We must preserve English, nourish it and shape it to our needs.

The world is shrinking daily. New Delhi and New York, Moscow and Madras are almost next-door neighbours, and this obliges us to keep abreast of world developments, or as the alternative, fall back into a mediaeval torpor. No one loves his country more than the German and yet almost every German can speak English. Nobody loves his language more than the Frenchman and yet English is taught in French schools. You would be astonished at the very large numbers of Europeans who flock to England during the summer vacation to attend language courses.

In Paris I once found myself in rather a mixed crowd. It was a veritable tower of Babel: Spaniards, English, Swedes, Germans and of course French. When the host, a venerable Frenchman, rose to make a speech he started in elegant French. But he soon noticed rather blank looks on the faces of some of his guests. He stopped, gave a sly wink to a German and said: All right, I'll speak in the only international language! "And he began again in English.

I believe that was the most damning confession he could ever make. But he did so sportingly, though not without a touch of gentle satire.

Expansion and Absorption

I should like to point out a significant analogy. English occupies the same place among the languages as Hinduism does among the religions. It has that great power of absorption, of tolerance, of expansiveness. Note how it has soaked in idioms, words and even syntax from the obscurist sources. Words such as, 'Jungle', 'loot', 'thug' and 'nabob' have been taken from this country. Sources of English words and expressions may be traced to Chinese, Hebrew, Russian, Greek, Egyptian, Red Indian and naturally Latin and Sanskrit sources. Therefore, it is international in a double sense; it is not only spoken all over the world but has a vocabulary taken from all over the world.

As a matter of fact to call it the "English language" is an error; for it is not really the original invention of the people of England. What we call the "English language" is the result of an evolution which has occurred through the centuries through the combination of historical events; and as Hinduism itself it has been the very broad result of certain evolutions, which manifest themselves in a certain philosophic attitude to life. Hence you are a Hindu, even if you happen to be a practising Communist, a true Christian, or an ardent Muslim, if you happen to have that peculiar philosophic attitude to life. That is why I believe that Shelley was a Hindu, though he never bathed in the Ganges, never made the pilgrimage to Badrinath, and never believed in the caste system. And I still maintain that he was a Hindu knowing full well that he had sexual lapses, drank wine, and ate beef.

Having said all this, let me make it clear that the type of English we should have in this country must obviously be of the Indian genius. There is Texan English, Swedish English, London English, Canadian English, Australian English, and even Madras English. None of these, or the hundred other varieties, will suit us. We shall have to evolve a virile Indian English. I believe that it shall be easy.

(Courtesy: 'Sunday Tribune')

Education By Mail

By Dr. HOMER KEMPFFER

India's Third Five-Year Plan calls for starting the development of correspondence education. Last year a member of the Ministry of Education spent a month in Australia studying correspondence education there. Already the same Ministry has initiated steps which should lead to first-year college enrollments in 1962.

Other agencies are also interested. The Principal of Delhi Polytechnic has recently returned after several weeks of studying correspondence instructions in the U.S. and Europe.

The Ministry of Scientific Research and Cultural Affairs has expressed interest.

The Indian Adult Education Association hopes to start two courses in workers' education in the near future.

Two private schools in Bombay, parts of international systems, of course, have been offering correspondence courses, chiefly in the business and industrial fields, for many years.

Where economy is important without loss of quality, the correspondence method can become a valuable adjunct to all parts of the educational system.

In Developing Countries

The correspondence method is proving its worth in developing countries where the essential ingredients exist:

- Literate students who strongly desire to learn.
- qualified teachers to prepare sound courses.
- instructors to provide individual instructional service by mail.
- a dependable postal system.

Indonesia and Ethiopia are among the developing nations which use correspondence instruction. They and Japan are using correspondence for the in-service training of teachers.

During its decades of development, the U.S.S.R. has made good use of correspondence instruction in scientific, technological, and academic fields. The recent reorganization of their educational system places even greater emphasis on this method.

Wide Uses

The correspondence method is most popular in highly literate countries.

Australia, New Zealand, and Canada use the home study method extensively in elementary and secondary education. In the U.S., more than 100,000 adults and many youths every year pursue their secondary education by home study.

In the U.K., 98 per cent of all chartered accountants have prepared for their examinations via correspondence. In the U.S. one-fourth of the accountants prepare through home study. The majority of engineering students in Scandinavia study by mail.

Correspondence education has probably reached its highest state of development in Scandinavia. Highly literate Sweden enrolls over ten times as many correspondence students per million people as does America. Norway, Denmark, Netherlands, and the German Federal Republic have heavy enrollments in correspondence instruction. All members of the armed forces in Norway must pursue civilian education either in residence or by post.

Every year in the U.S. more people enroll in correspondence courses than enter the first year of all colleges and universities combined.

Occupational Upgrading

Over 6,000 private business and industrial organizations in the U.S. use correspondence instruction for upgrading their employees—chiefly in the skilled trades, commercial occupations, and professional areas. Most of them arrange instruction with private schools but a few large ones conduct their own in-service correspondence courses. In addition, a dozen trade and professional associations offer correspondence instruction to their members.

Hundreds of thousands of men in all branches of the armed forces in the U.S. study both military and civilian subjects by correspondence. Completion of courses opens the way to promotion. Big civilian agencies of government likewise train their employees with basic and refresher home study courses.

A long list of American leaders in business, industry, and public life have benefited from correspondence instruction. Many got their start to a successful career by "burning the midnight oil" of kerosene lamps. Millions more of limited formal

schooling have acquired the knowledge and skill necessary to climb up into middle-class life through systematic instruction by mail. Ex-President Eisenhower's father was a correspondence school graduate.

What is Taught?

"Anything that can be learned from a book or by following written instructions can be learned by correspondence."

Courses emphasizing knowledge are the simplest to organize and conduct. About 150 accredited U.S. colleges and universities offer correspondence courses in academic, agricultural, business, engineering, home science, teacher-training and several other fields.

By tradition, recognized American colleges and universities are primarily resident institutions. They do not offer degrees entirely by correspondence. Institutions in the U.S. offering college degrees wholly by mail are the so-called "degree mills" whose degrees are considered fraudulent. Partly because of the low reputation of these schools, the correspondence method has never been accepted for complete degree requirements. However, many U.S. colleges and universities allow up to one-fourth to one-half of the degree requirements to be filled by this method.

In European countries the correspondence method has not been hampered by unfortunate early association. The University of London Extramural Department offers degrees based entirely upon examination. Preparation for these examinations can be entirely by correspondence or any other way.

The biggest correspondence enrollment in America is in engineering, technical and business subjects in which knowledge and its practical application are integrated in the same course. Mailable kits of well-selected tools and practice equipment are supplied in such courses as air-conditioning, commercial art, electronics, engineering drawing, photography, radio repair, tailoring, and watch making. Disc and tape recordings are used in foreign languages, public speaking, and in some music courses.

Some practice equipment, however, is too big to mail—steam engines, power lines, turbines, railroads, factories. In such cases instruction is offered to employees who have access to the necessary equipment.

An Effective Method

Instruction by correspondence has proved to be an effective method for over two generations. Over 30 research studies show that the achievement of students who finish correspondence courses is equal to and sometimes slightly better than that of classroom students in the same subjects. There are five reasons for this:

1. Written subject matter is likely to be better organized and more clearly presented than are oral lectures. A school enrolling 10,000 students each year in accounting can afford to spend the time and money to prepare excellent materials. A lecturer is lucky if he has an hour to organize his thoughts.

2. Written materials can be pre-tested, revised and rewritten repeatedly for easy understanding.

3. Every part of a correspondence course must be mastered; all assignments are worked out by every student.

4. Quality control on instructional services can be easily maintained. Resident instructors visiting good correspondence schools are amazed at the high quality of instruction.

5. Instruction is individual. The instructor is a tutor to each student; each person's difficulties are remedied personally and in writing.

Flexibility

The flexibility of correspondence instruction gives it other advantages:

Each student can progress at his own pace. The able and fast are not held back to a fixed class schedule. The slow can take all the time needed. The busy can postpone study to a slack time.

A person can enroll and start his course at any time. He need not be a slave to an academic calendar. Travellers can study enroute or while away and not miss classes.

Correspondence instruction is an adult way of learning. Indiscipline is no problem. The undisciplined will make no progress until they discipline themselves to their own study schedules.

A correspondence student not only learns subject matter but demonstrates character traits that employers like—drive and dependable work habits. Correspondence instruction is an excellent way to screen out those who are unable or unwill-

ling to do serious study. They need not later clutter college classrooms.

Correspondence reaches women tied down to their homes and youth too young to go away to school.

Most correspondence students earn while they learn. They are employed and study in their spare time—lunch hours, evenings, weekends, holidays. They can contribute to their family and national income while studying.

Most study is done at home. Travel time is saved for productive study.

Home study can be combined with group study, instruction by radio and television, and other educational methods. Some schools arrange for students to come in for short terms of supervised laboratory and practical work around big or complicated equipment.

Economy

For very good reasons correspondence instruction usually costs from one-half to one-tenth as much as resident schooling. All the investment in classrooms, hostels, libraries, laboratories, and campus is saved. Only offices for the staff are needed.

Available money can be spent on preparation of courses and on instructional services. If courses are properly prepared, one instructor can serve many more correspondence students than he could as a classroom teacher. While each course needs to be prepared by a thoroughly competent professor, student assignments can often be properly evaluated and corrected by instructors of lower qualifications.

Correspondence study, while employing individual instruction, can benefit from the economics of mass production. Texts, study guides, instructional equipment, and record systems come cheaper in large quantities. The greater the enrollment in a course, the lower the costs. One correspondence centre can serve an entire nation.

A Democratizer

More than any other, the correspondence method extends educational opportunity to all literate people regardless of age, wealth, or circumstance. Education often remains the privilege of the elite unless some means is found to extend it to all at whatever time in life they need it. Once a person starts to work, full-time resident instruction is seldom practicable.

Evening colleges are feasible only in urban centres.

Two prominent American educators have written: "High on the list of institutions that are democratizing education stand the correspondence schools, most of which offer training both in general education and in vocational subjects for many different occupations. Their offerings cover a wider range of courses by mail than are available at residence courses in any community, large or small. The repertoire of every correspondence school is available through the post office, to every student not only in the United States but in the world. The student does not travel to school. The school comes to him."

FORTHCOMING EXAMINATION

Indian Navy Examination, December, 1961

The Union Public Service Commission will hold an examination at Allahabad, Bangalore, Bhopal, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Jammu, Madras, Patiala, Shillong and Trivandrum commencing on 5th December, 1961, for selection of Special Entry Cadets for the Indian Navy.

Age Limits: Candidates must have been born not earlier than 2nd January, 1943, and not later than 1st January, 1945. These age limits can in no case be relaxed.

Qualifications: Intermediate or equivalent. Applications from candidates who have appeared or intend to appear at Intermediate or equivalent examination acceptable provisionally. Application forms and full particulars obtainable from Secretary, Union Public Service Commission, Dholpur House, D.H.Q. P.O., New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. A candidate must clearly state on money order coupon "Indian Navy Examination, December, 1961," and also give his name and full postal address in block letters. Postal orders or cheques or currency notes will not be accepted in lieu of money orders. Application forms and connected papers are also obtainable free from the nearest Naval Office. Only unmarried male candidates can apply for admission to this examination. Completed applications must reach the Union Public Service Commission by 21st August, 1961 (4th September, 1961, in case of candidates residing abroad or in Andaman and Nicobar Islands).

WHY BE AFRAID OF EXAMINATIONS?

By MARJORIE BOULTON, M.A.

The time to begin passing an examination is the first day of the course that leads to the examination. Steady work throughout a course is much more valuable than last-minute cramming.

The steady worker can generally find time to read more than a few essential books, to widen and deepen knowledge and to understand the general background of the specialist work. But what we try to memorise in haste we also forget quickly. There is no technique whatever that will enable a really unprepared candidate to pass an examination, if he or she does not have at least a minimum of knowledge.

There are, however, two common causes of examination failure, or of needlessly low marks, which have little to do with laziness or stupidity. They are examination nerves, and mishandling of the examination questions.

Most people who have taken examinations have either experienced or observed examination nerves. A candidate feels sick, may have a headache, may weep or behave oddly in the examination room. He or she feels no confidence, cannot collect thoughts together sensibly, may be unable to start writing, and so on.

People with mild cases of this trouble may overcome their fears and do fairly well. But I have seen cases where the candidate was much harmed by these examination nerves. They can cause complete failure. The candidate may be unable to take the examination or may even collapse completely, and student suicides have occasionally resulted from the unbearable despair.

This frightening and rather absurd misery is unnecessary.

Examination nerves may be the candidate's excuse so that, if he fails he need not admit that he did not work. More often they are the result of real stress and are something like the stage fright of the actor. If the distress is very severe, the candidate should consult a doctor or a qualified psychologist. Nowadays there are a number of useful drugs that can relieve tension, and professional advice may help.

Sometimes, too, examination nerves are one of several symptoms of general poor

health, and some medical treatment may help.

Usually the candidate can help himself. An examination ought to come naturally, as a reasonable test after a period of study. The candidate who has worked through the course conscientiously has usually nothing to fear. To tell oneself this is a great help.

Then students should always avoid—scare-mongering conversations, which help to increase any nervous tension that may have begun. Such negative suggestions as "I know I can't do it!" "Here's one who won't get through!" "I might as well not take this, I know I shall fail!" are psychological poison.

Candidates should try to talk cheerfully and with positive suggestions for themselves and one another: "We'll manage to get through." "Well, this is it. Let's make a good show!" "I've done my best; now for one last spurt. . . ."

There is no sense in giving ourselves discouraging suggestions at this stage. Even the candidate who has not worked hard, and who really has cause to fear failure, will have a better chance of scraping through if he goes into the examination room ready to do his best.

Where there is more than one paper, inquests should be avoided. "What did you put for question 4?" "Oh, I didn't think that was what they wanted!" "Oh, dear, if that's right I've made a hopeless mess of things!" We all know the temptation.

To go over a marked examination paper later, and learn by one's mistakes, is educational and useful. But when we are trying actually to do a series of papers, these inquests merely discourage us and increase the nervous tension. When a paper is done it is done, and it is better forgotten until the results appear.

The sufferer from examination nerves should try to relax the muscles, especially those round the face and across the abdomen. A very nervous candidate can relieve the tension somewhat by deliberately lying down and relaxing all muscles for a few minutes shortly before the examination if a suitable place is available.

Deep and slow breathing is a great help. Very often quite a bad attack of

nerves may be quietened by taking a few deep breaths.

A piece of chocolate, a not too rich sweet, such as barley sugar or plain caramels, or a glucose tablet, often gives a little extra energy and so makes the candidate feel better.

Many candidates find it helpful to have something of this kind to eat in the middle of the examination. I recommend this to students, though it should be added that peppermint odours, crunching or noisy sucking are not fair to the other candidates. Sometimes a candidate who is feeling a little hysterical is helped by drinking a small glass of cold water.

Kiss for Luck

A friend who sees a candidate in a bad attack of examination nerves will not help by fussing, joining in complaints, or spreading alarming rumours about the examination. Some of the ways in which a sensible friend can help are: an encouraging smile and words; a friendly pat on the shoulder; a good joke; offering a sweet. The appropriate person can sometimes help a great deal with a good-luck kiss.

A friend at a distance can often give a surprisingly useful encouragement with a kind note. I once saw how a candidate, who had twice failed an examination by going to pieces with nerves, was saved at the third attempt by a friend's encouraging and humorous good-luck notes that arrived twice daily.

The parents of examination candidates should never, just before the examination, frighten the candidate with threats, or damage self-confidence by sneers or scoldings. To talk about parental sacrifices is one of the quickest ways to arouse guilt feelings so severe that they can produce desperate anxiety and ruin the candidate's chances.

A candidate whose examination nerves seem very persistent and excessive can sometimes help himself by asking the strange question. "Why is it that I want to fail?" For if we fail in something when our talents and the circumstances are such that we might reasonably expect to succeed, we may be subconsciously wanting to fail.

What are the commoner reasons for this? Perhaps we feel guilty, such as our sexual feelings of conduct, our mixed feel-

ings or bad behaviour towards our parents. Or we may feel a desire to punish someone else who will suffer if we fail—most often, a parent.

Again perhaps we do not really want to take up the career to which this examination leads. Or we are hungry for affection, and secretly feel that our only hope of gaining some sort of kindness and show of sympathy is by failing and being pitied.

A honest survey of such possibilities can be illuminating. If we can see where there is something unrealistic in our attitudes, we can sometimes teach ourselves to think more sensibly.

It is much easier to learn how to deal with examination questions than to master our nerves. Yet every year thousands of people lose marks they were capable of gaining, and probably some scores of people fail examinations completely, because they did not approach the question paper in the best way.

Reading the question-paper attentively is a very important part of doing an examination. In a three-hour examination it is not unreasonable to give as much as five minutes simply to studying the question paper and grasping quite clearly what one has to do.

Read the Rubric

Every year many candidates even fail to read the rubric. If the paper says "Answer four questions," each question carries 25 per cent of the total marks. Thus the candidate who answers only three questions has to be marked out of 75 per cent only, so that pass-standard work may give a failure mark. Also the candidate who answers five questions gets no marks for the last question, wastes precious time and probably vexes the examiner.

If the paper says "Answer the first question and three others" or "Answer one question from section A, one question from section B and one other question" the candidate must do this. Disobedience to such instructions automatically means a heavy loss of marks. Examiners always have reasons for their rubrics.

The wise candidate also takes care to answer the question. Many examinees notice what the question is about, think "Ah, I know about that", and write down all they know on the subject. All they know may be much more than has been

asked for, in which case they are wasting time.

A young man told to answer questions on a piece of French prose, first made an excellent translation of it—which was worth no marks at all, since it had not been required.

Every examination candidate should first read the question carefully and be sure to give everything that this form of question requires, and to add nothing more.

"Explain" means **explain**: show what the statement means, perhaps with examples or diagrams or graphs. "Discuss" calls for a **discussion** on paper. That is, at least two points of view must be given with the arguments in favour of each, though at the end the candidate may like to conclude in favour of one point of view.

"Give examples" means what it says, "Illustrate" usually means much the same as "give examples," though in some subjects it might mean "draw pictures." "Support or refute this" means take one side or the other of a controversial statement and give all the arguments and evidence of which you can think.

"Trace" implies that the candidate must follow some sort of sequence—tell the story of something in the right order, give stages in an argument. "Justify" demands full evidence for the point of view quoted in the question.

A particularly common mistake is to take too little notice of the word "Compare." Now, if two things are to be "compared" it will never do just to describe them; there must be a true **comparison**. Like this:

"Wordsworth lived to a ripe age; Shelley died young. Wordsworth is associated with the Lake District, though he also travelled on the Continent; Shelley spent much of his adult life in Italy. Both poets wrote of Nature with deep appreciation, but Wordsworth was the more serene, Shelley the more rapturous."

A little discourse on Wordsworth, followed by an unrelated little discourse on Shelley, however correct and intelligent each may be, is not an answer to the question: "Compare Wordsworth and Shelley as men, thinkers and poets."

I have, I suppose, now marked more than three thousand full-scale examination papers, with innumerable written exer-

cises, tests and theses. It is constantly my experience that nearly all examination candidates (who are not hopelessly slow or very ignorant) could with great advantage think more and write rather less.

There is no special merit in writing twenty pages in an examination. If everything worth saying could have been well said in fifteen pages, five pages probably consist of time-wasting padding that will only annoy a tired examiner.

Best Answers

The best candidates write answers that have the material arranged in a systematic way and that are well packed with facts (where facts are being tested, for some questions test also judgment or style). Five minutes out of forty may well be spent in planning an answer so that the written answer is not like a jellyfish, but has some perceptible bones.

The candidate who does not waste time with meaningless padding may find time to write more tidily. Good handwriting often gains a few marks; at the very least, it will put the examiner in a good humour. In all subjects it is wise to give some attention to handwriting, layout, paragraphing, grammar, punctuation and spelling. A badly constructed sentence may obscure our meaning when we do actually know the facts required.

The student who wrote "If fresh milk does not seem to suit the baby, try boiling it" knew something about infant feeding, but a literal interpretation of her answer would not suit the baby at all.

Three final hints on examination behaviour may be helpful to some candidates:

1. Never sit up late cramming the night before an examination, or even the night before that night. It is almost impossible to do any useful learning when we are exhausted, and a good night's sleep makes us able at least to do our best in the examination.

My own view is that the evening before the examination is better spent with friends or in some pleasant small outing than over books. The work should have been done earlier and now relaxation is required.

2. Try to eat a good meal before the examination. Few people do their best on empty stomachs. However, if the examina-

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The Scientific Approach To Quick Reading

By DAVID GUNSTON

It has been said, with no little truth, that modern executive efficiency depends increasingly upon a high degree of skill in two very ordinary things: reading and remembering.

Now memory-training has long been familiar, but only comparatively recently has any serious thought been given to increasing individual skill and speed in normal, day-to-day reading. Quick reading, as such, is a new ideal.

The need for some such development of course grows daily more apparent. The world of today is speedily burying itself under a vast mass of the printed word, not only for the purpose of enlightenment, education, entertainment and the spreading of news, but in every branch of modern life, for the organization and running of human affairs from Acts of Parliament and Government regulations to price-lists and income-tax returns. Whatever may be the impact of television, we all of us have to read more and more, not leisurely as with great literature, but hurriedly, against time. The average business executive finds his eye-work constantly lagging behind the pile of printed matter waiting on his desk and bookshelves to be devoured. Even the most avid ordinary leisure reader with unlimited time would consider an average-length novel a day pretty good going.

Yet that is just what many executives are expected to tackle as the minimum each day: 50—60,000 words, the contents of a slimish novel or a serious Sunday newspaper read from cover to cover. That makes a weekly intake of the printed or typed page of at least 250,000 words, based on the modest estimate of 150 business letters (incoming, outgoing and file copies for reference), 60 memoranda, 20 business reports, five daily papers, two Sunday papers, four trade journals and two periodicals. In practice, however, most top executives simply have to assimilate much more. The estimate omits books and industrial reports, local newspapers, political and economic commentaries and the like, as well as confining the reader to only one national daily newspaper. To keep abreast of trade, technical and scientific discoveries, to say nothing of the swiftly-changing world scene, most businessmen need to be capable of

speedily reading and absorbing more like 100,000 words a day.

It is perhaps an unpalatable fact that, to keep up with the tide of modern events in every sphere, one must absorb a goodly proportion of the daily output of printed words. Yet we normally speak only about 200 words in a minute, and read between 300 and 500 a minute.

As a rough guide to your own reading speed, if you can read through and understand the whole of this article (2,500 words) in 3—3½ minutes, your reading speed is above the dividing-line of 700 words per minute, or very good. If you take 4—5 minutes, your reading speed of 500—600 words per minute is still well above average, while if you need 6—7 minutes or longer your reading efficiency is only just average, or below par. The trained quick-reader would be able to absorb this article in anything from 2½—3 minutes, with a comparable saving of time on everything else read as well. The essential criterion is to read to understand fully, not to skim through, gleaning only a rough idea of what the whole is about. Skimming has its uses, and its rate may with training be stepped up to fantastic speeds but it is not quick reading, which is merely ordinary reading speeded up to take the fullest advantage of the human optical apparatus, and to cut down wasteful methods of dealing with the printed page.

Now all this may sound like a remote ideal for those with aptitude, and sheer unprofitable grind for those with none. Yet the fact remains that an ordinary average reader can step up his usual speed of say 320 words a minute to around 900, solely by training his eye and brain to work faster and less wastefully. Of course, aptitude plays some part, but even the slowest reader can be helped. The great thing is to be convinced first of the advantages of quicker reading (which should be obvious) and then of the immediate possibility of increasing personal skill in this way. Without doubt it is true to say that everyone with normal eyesight, or with the required correction provided by spectacles, can improve his reading efficiency to some extent without placing any strain upon either the optic nerves or the brain.

The human brain is nowadays considered capable of much speedier digestion and reaction than our usually rather plodding reading allows, as witness our much greater speeds in shortburst speaking or even writing. As for the human eye, this is clearly capable of far greater performance than it normally gives in reading, the basic technique of which has remained unchanged through many centuries of literacy. Watching cinema or television screens, fast-moving cars, racing animals or balls, it registers much faster than when confronted with the printed word, simply because our reading methods have never altered from childhood.

Training can raise the reading speed by improving the function of two essentials: the eye-page relationship and the eye-mind relationship. The former is improved by obviating the waste of time caused by undisciplined eye movements, and the latter by teaching the brain to take in at a glance not just a single word but a whole group of words. Reading training also encourages a reader to adjust his speed to the gravity or importance of the words themselves.

The technique of stepping up individual reading speeds and applying such training in industry, commerce and education is an American notion that has barely yet caught on in Britain, where the whole subject is sorely neglected. Inherently convinced, as always, of the need for improvement in the already good, for greater efficiency in the efficient, to say nothing of their natural enthusiasm for a new idea, the Americans have studied reading training closely and scientifically, devising not only basic methods of training in faster reading, but also ingenious electrical apparatus for carrying it out. Several of their universities have helped in these investigations, which would seem to dispose of any suspicion of charlatanism, and there is a rapidly-approaching feeling that basic tuition in reading quicker than the present accepted norm must become part of the everyday curriculum in schools and colleges throughout the country. That a generation hence, in fact, their people will automatically read quicker and more efficiently than they do now. Hustle will then have invaded the printed word!

Their view of the matter, however, is that newer, more effective reading tech-

niques are necessary in a civilization so dependent upon mountains of printed words. After all, they claim, we still read in exactly the same way as the educated did before the spread of mass literacy—and as a moment's observation almost anywhere will prove—with many of us still using the primitive if half sub-conscious technique of quietly saying each word over to ourselves as we read. It is difficult to find a flaw in that argument. Primarily, of course, the gain would be to those in industry, commerce, teaching, journalism and other fields where heavy reading is already essential, and always there must be complete comprehension. That there are also danger is evidenced by the innocent remark of the young schoolmaster who gleefully explained, when told of the idea as applied to children, "Look, sir, I can teach the lads to read one-syllable Westerns twice as quickly."

The key to quick reading is in training oneself to absorb whole phrases, instead of just single words, at a time. The ordinary reader's eye moves jerkily from each word to the next, pausing and continuing, sometimes going back for a second look. This, the experts claim, is little better than the lowest reading stage of all, of articulating each word to oneself as one reads. In fact, training starts with the basic assumption that the learner reads word by word, as if he were actually reading aloud. It has been computed that the time spent with the eyes focusing on separate words accounts for up to 90 per cent of the time taken to read any passage, and it is this section of the reading process that offers the greatest scope for increasing speed. Training is therefore concentrated on reducing the number of times the eyes stop on each line and, consequently, on achieving a corresponding increase in the spar of print taken in at each stop.

Various methods are used to effect this until the student reaches his limit. At this point a learner's confidence in his new ability must be consolidated, otherwise he will all too easily revert to his former inefficiency. Confidence building is greatly assisted by including in a training course a series of timed exercises. These may consist of passages of about 1,000 words which are read at maximum speed consistent with their degree of difficulty of subject. The time taken to read each exercise is recorded and a set of questions on it is then posed.

Thus a record of progress in both speed and comprehension is obtained.

An aid to comprehension which deserves close attention is an understanding of paragraph structure. The quick reading courses so far devised are in the main designed to help the businessman deal with semi-technical and business literature, which can be described as 'practical prose.' The primary purpose of such practical prose is to convey information and the best way to do that is to use separate paragraphs or sections to express separate items of thought or information. Each paragraph then contains a "main idea" and supporting details. Although this is the ideal arrangement, of course it is not always achieved. But it occurs often enough in practical prose to make it worth while devoting time and practice to fostering the ability of extracting from a paragraph its "main idea" in the minimum of time. If each separate paragraph is read in this light, comprehension of a whole passage becomes much simplified.

It is not difficult to train the eye to read by phrases or even whole lines of words together, swiftly extracting the point of each paragraph and passing smoothly on to the next, a rapid mental and optical process geared to modern needs. In time there comes an instantaneous recognition of words, phrases and even figures which greatly helps the overall speed of reading.

The American quick readers have, as might be expected, tended to invest their innovation with a certain aura of the revolutionary and the frightening that is hardly justified. They have brought to it a special jargon that may perhaps intimidate some: certainly one or two of the phrases used have a slightly sinister, 1984-ish sound to them: phrases you understand are "thought-units", checking on speeds is "pacing", and there is much talk of "comprehension percentages", "overall average improvement" and of the need for "motivation" if one is to succeed. But these things need not obscure the central fact, as shown by many individual records, that the basic technique can achieve the desired results with a good degree of permanency, sometimes far in excess of an individual's expectation.

There may be a wide diversity in the manner in which reading improvement courses are presented. Some have been

conducted by correspondence, some use "mass instruction" techniques, others deal individually with each student.

Two main training methods have however been found most effective. One, devised by Harvard University, uses the split-second projection on to a cine-ma-size screen of gradually longer phrases to teach large groups of people at the same time. More lastingly effective is the other method, based on apparatus devised by the Reading Laboratory, Inc., of New York, which employs small table-top machines for individual tuition. The method is generally more successful, because people's reactions and aptitudes vary, but it needs more time and training staff.

The first machine used is called the tachistoscope, or flashmeter. Words, phrases and numbers of gradually increasing complexity are momentarily illuminated on a card inside the box-like device, the exposures varying from 1/10th to 1/100th of a second. The trainee learns in time to identify them in a single flash of comprehension, and it is surprising how facile this becomes with practice. In fact, most people learn quite readily to read and retain nine-digit numbers or complicated arrays of symbols in the minimum of time. It is merely a question of practice and persistence. The faculty thus obtained is invaluable when it is necessary to focus the eyes speedily along lines of print.

The other machine really spurs one on to read a little faster, a little faster still—for a slow but inexorable green blind sweeps down the printed page as one is reading, forcing one to take in whole phrases instead of single words. The movement of the descending blind can be speeded up as proficiency increases. This is a most ingenious device for teaching a faster rate of reading, and as detailed questions on the text have to be answered afterwards, there is no danger of a pupil increasing the blind's speed faster than his rate of comprehension.

British investigators who have studied these American techniques confirm their value, but claim that the subject-matter used is too simple for our purposes. They take the view that the quick reader should be able to assimilate even detailed technical material faster than the normal reader. Critics of the whole idea say that it would

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New Ways Of Harnessing Energy

By Prof. RITCHIE CALDER

What is there so new about sources of energy which are billions of years old? Solar energy? The thermonuclear reactor 864,000 miles in diameter which we call the sun has been generating energy since long before our planet came into existence. Wind energy—The winds ruffled the hair of our primeval ancestors. Geothermal energy? The kettles in the earth's crust have been on the boil since before life began.

By such tokens, the United Nations Conference on New Sources of Energy, to be held in Rome, 21-31 August, seems misnamed; but no one need have any doubt about its meaning: the adjective "new" applies to methods recently devised for harnessing such sources. Spelling out those new methods will mean new opportunities and new prosperity for newly developing countries.

This is a "do-it-yourself" conference. Two previous United Nations Conferences on the Peaceful Uses of Atomic Energy (1955 and 1958) described the spectacular advances in the release of energy by artificial means from the nucleus of the atom and also held out prospects, not yet fulfilled, of reproducing on earth the processes by which the sun generates its energy. That would have afforded energy a million times greater than that from the fossil chemicals we call coal and oil. With fission energy and splitting atoms and fusion energy from welding atoms, it might have seemed that in man-made reactors needy countries might find the energy without which there can be no real prosperity and material well-being for the peoples.

Difficult Answer

One day they will, but even the wealthy and technologically advanced countries are finding that the answers are not quite so glib. The fusion reactor (sun-on-earth) is still a long way off. Fission reactors for industrial use are still engaging vast sums of money on research. Those which exist, as in Great Britain, are suitable only when they are supplying large industrial areas or feeding electricity into an existing grid system. But—and this is the nub of the problem for countries in process of development—power plants of that size are possible only when large-scale industrial centres exist or the electricity supplies can be

spread by an extensive transmission system. What they need is means of energy production which will grow as their industries grow.

In the absence of small-scale and not too expensive atomic reactors (which still do not exist for industrial purposes), countries which are just starting to develop have to find alternative sources. If they have coal or oil or cataracts, so much the better, although those still need expensive conventional power plants or hydroelectricity stations.

The countries which the United Nations had in mind in bringing together the world's experts in Rome were countries still largely dependent on muscle power human or animal. Muscle energy is the most expensive energy in the world and paradoxically, it is all the poorest can afford.

A typical scene in a topical country is that of a bullock team, or a camel, raising water from a well. To the chanting of the drivers, sweltering in the sun, the animals trudge backward and forward or round and round, lowering the buckets into the well hoisting the water and tipping it into courses to water the thirsty soil from which both the men and their beasts get their food.

Those peasants are desperately poor yet they use calories in their most expensive form, as food for themselves and their animals. The energy-equivalent which the team produces costs 20 times as much per unit as the energy from Britain's Calder Hall Atomic Energy Station. An industrial worker in a highly developed country can with the flick of a switch command the equivalent of the efforts of a hundred human slaves. When we thriftily go round the house switching off lights to keep the electricity bill down, we might think of the Indian peasant burning cow-dung to cook his food for his muscle energy. Because he burns that dung instead of using it as manure, his soil is undernourished, his crops are undernourished, and he is undernourished.

Economic Effect

If one reduces the Rome Conference to the terms of that peasant, it is seeking an effective windmill to pump the water, an

economic solar stove to cook his meal by the sun's rays or, as geologists think is likely in some places, to find a source of hot steam or gases in the earth's crust to generate electricity cheap enough to do both.

Solar devices cover a wide range of applications from producing heat equalling that of the fireball of an atomic bomb to producing ice by refrigeration. Since Archimedes set fire to the Roman fleet besieging Syracuse by using burning glasses, and the sentries of the Incas on the heights of the Andes used concave mirrors to light their signal fires and relay warnings, men have contrived to focus the sun's rays to obtain intense heat. That is because, mercifully for our survival, the radiations from the sun are diffused. They have to be collected, as in the basin of a concave mirror, and reconcentrated.

A great deal of ingenuity, as will be revealed at the Conference, has in recent years gone into the methods of tapping the sun's rays, using them directly as in the smelting of recalcitrant metals or preparation of fine chemicals, or using them to heat water for industrial purposes or for making electricity. But there will also be accounts of how the sun, where its heat is fiercest as in desert places, can be used to keep houses cool.

Two Problems

Two big solar advances which will be discussed in Rome derive from desert research and from space research. The first is a solar pool which, instead of using vast expanses of mirrors, traps the heat in a shallow lake, so contrived that the bottom waters of heavy brine get hotter and hotter, but the heat does not escape into the atmosphere because of a top layer of fresh or less-salt water. (The "trick" lies in the differing densities of the water which prevent them from mixing, unless stirred).

The second is the solar battery. This consists of waters of silicon which, activated by the sun, spontaneously release electricity. The Vanguard satellite of the United States has been in orbit since 17th March, 1958 with its transmitters powered by such solar batteries; and, three years afterward, the signals were still coming through "loud and clear". Such batteries are expensive, though not in the economics of space, and the work which has been done on them will redound to the benefit of

poorer countries. Already, as will be discussed at the Conference, there are possibilities that treated plastics will serve in place of the delicate (and costly) crystals of the present batteries.

Wind power is largely a question of putting the right windmill, at the right price, in the right place. Since the applications—pumping water or making electricity—are self-evident, much of the interest at the Conference will concentrate on measurements and locations. There will be accounts of their use in Antarctica.

Questions on Geothermal Energy To Be Examined

Every one concerned with the Conference attaches the greatest importance to the disclosures which will come in the sessions on geothermal energy. Since the Conference was first called, it has become obvious from the papers received and their unexpected range and revelations that geothermal energy has for many newly developing countries a significance at least as great as hydroelectricity.

There has to be a "kettle" under the country, but it would seem that that may be true in far more localities than those where geothermal steam and gases have, in nature, escaped to the surface as in the geysers of Yellowstone Park, Iceland, New Zealand and Italy. Where a source can be tapped it has the advantage of being "on request". It can be used in the amounts required to meet the gradual needs of industry or a growing community. And, unlike wind and water power, it is constant.

Power from the sun, power from the wind, power from the subterranean furnaces, power for the poor—that is what the Rome Conference means.

A simple solar cooker, made cheaply of plastic, with which village housewives could cook the family meals, was being introduced into Mexico.

On one side of the hill, the apparatus was a popular success; on the other, it was a failure. The fiasco had nothing to do with the sun. It was just that the superstitious villagers on one side would not trust the food cooked in the stove.

This experience indicates that anthropologists ought to have a role in introducing the devices to be dealt with at the United Nations Conference on New Sources of Energy in Rome August 21-31. Scientists

may send solar batteries out into space in satellites, or use mirrors to reproduce the heat intensities of an atom bomb, or trap the sun in pools to make electricity but, when it comes to introducing new devices into the homes which need them, custom may overrule their advantages.

For example, one of the reasons why the solar stove, which was intended to help in the domestic fuel problem of India, has not been the success which was hoped is that it means cooking in the open and women do not like to have their culinary efforts supervised by bystanders. In addition, the family meal is eaten at night, when there is no sun. Another reason is the price. Even a modest \$14 for a device which needs no fuel is excessive where the average income of a peasant is less than \$100 a year.

Solar Cookers

A solar stove is very simple. It is like an inverted umbrella—a concave mirror with a pot suspended in the focus of the sun's rays on what would be the umbrella handle. Indeed, in the United States solar cookers with the reflectors made of metalized plastic have been made to fold up like umbrellas which picnickers can conveniently carry.

Such a reflector is a long way down the scale from the giants which will be introduced into the discussions in Rome. One projected for the Pyrenees will be 50 meters (about 55 yards), in diameter and will generate 1,000 kilowatts of heat, compared with the already famous one there which generates 70 kw. These solar furnaces can recapture the fierceness of the sun's heat to smelt intractable metals, puncture a hole in the toughest armor-plate, or help scientists study under controlled conditions the heat that is released in the fireball of a atom bomb.

But even the giants are now being fabricated from plastic materials. Once glass mirrors were used; then burnished metals and now man made plastics. These have many advantages, including eventual cheapness, lightness and toughness. What is more, they can be spun into shape.

For some time, it has been recognized that mercury when it is spinning forms a precise paraboloid, accurately concentrating the sun's rays. Liquid plastics can be made to behave that way, too. The plastic is poured on a roughly paraboloidal under-

structure which is rotated at a controlled speed until it sets in the exact form. In an American 10-foot-diameter precision mirror, aluminized Mylar plastic is backed by polyurethane foamplastic to make it permanently rigid.

'Solar Pond'

More will be heard at Rome about the "solar pond" which excited eminent scientific visitors to Israel last year. To capture enough sun to provide energy on a scale big enough to run a power plant would require an expanse of several square kilometers of waste water could be used instead.

The principle is based on a natural phenomenon discovered in a lake in Hungary where the bottom waters were found to be warmer than the top layers. The explanation was a difference in density. Adapting this, Israeli scientists have used heavy brine for the bottom waters of a "solar pond" and not-so-salty water on top.

The result is an inversion of what happens in a hot-water cistern in which the hot water rises to the top and the cold water stays at the bottom. When heavy brine is used, the salt makes the bottom layer denser so that it will not mix with the top layer, which thus acts as a transparent lid. The pond is shallow and the bottom is black—a black surface attracts and retains heat. The bottom waters get hotter and hotter, and the heat cannot evaporate because the non-mixing of the layers prevents convection. In the Dead Sea experiments it has been found that, whereas the water at the top is merely tepid, the salt water two or three feet down would easily scald the skin off one's hand.

In a shallow pond, the heat produced could be transferred to generate electricity. Since arid countries with abundant sunshine usually suffer from water which is too salty to be used for drinking or irrigation, a curse can be turned to an advantage if this method fulfils its promise.

Solar Batteries

The new excitement about thermoelectric power derives to a large extent from the exploitation of "semi-conductors". Typical of these semi-conductors are silicon batteries that, with no source except the sun, have been sustaining radio signals from the "Vanguard" space satellite, which has been in orbit for over three years and is still sending messages back to Earth. The

cells of the batteries are wafers of silicon crystals which, when exposed to the sun, become agitated and release a current.

However, preparing semi-conductors from crystals of silicon or materials, such as gallium arsenide or cadmium sulphide is tricky and expensive. The wafers cannot be large and coupling them together increases liability to subsequent failures. But big advances have been made—subsidized largely as a result of space research—and the conference is likely to hear of devices which will use plastics, embodying the necessary elements and capable of being made into large-scale sun-traps. It will discuss the technical problems which still have to be solved before such devices can be a major contribution to the economies of newly developing countries.

The experts will also report on latest developments in solar distillation of sea-water heating and cooling of homes by solar energy and—that paradox—using the blistering heat of the sun to produce refrigeration.

Science is just beginning to “discover” the sun!

WHY BE AFRAID OF EXAMINATIONS?

(Continued from page 705)

tion is of any length, do not drink too many cups of tea—the result may be embarrassing

3. Never take drugs, to keep awake, to get to sleep, or to give special pep for the examination, except on the advice of a doctor. Most of these medicines have side effects that can be awkward, and their action may be chancy.

For example, a tranquillizer can reduce our capacity for self-criticism. A pep pill may leave us depressed if the action wears off too soon. Sleeping pills and sedatives often make us feel muzzy.

The best way to succeed in an examination is to work sensibly and steadily all through the course. And then our last concern must be to do full justice to ourselves in the examination.

In normal circumstances, and provided that the person is fit for the course, steady work combined with good examination technique is very nearly an infallible formula for a pass.

(Courtesy: 'The Psychologist Magazine')

THE SCIENTIFIC APPROACH TO QUICK READING

(Continued from page 708)

be better to read less at the old speed, and blame the appalling prolixity of the mass of present-day printed reading. That may seem a rather old-fashioned view, and in any case it would be difficult now to attempt to stem the tide, and probably more practicable to learn to swim faster. Nevertheless, a trained quick reader, even one skilled in speedy skimming, need not lose the art of reading good literature and poetry slowly and at leisure.

Quick reading systems have so far had only a brief and limited introduction in Britain. The London Quick Reading Centre, sponsored by Sir Robert McAlpine, has been temporarily closed down after a year's trial period. It enjoyed no official or industrial federation support, had to pay a royalty to the Reading Laboratory for the use of its methods and apparatus, which was not designed for use in Britain, and had to charge uneconomic fees. Nevertheless, it achieved some remarkable results and proved the investments of British firms which took up the idea for their executive staffs (among them I.C.I. and Leyland Motors) to be eminently worth while. One firm whose 28 executives took the 14-session course, found an overall gain in their reading speeds of 101.3 per cent. Individual reading speeds increased as much as 184 per cent without any strain.

There would doubtless have to be a good deal of enlightened propaganda directed at the right quarters before quick reading could become firmly established in Britain, but results such as these, achieved under conditions of some difficulty, are sufficiently impressive for the idea to be given every consideration.

(Courtesy: 'The Sunday Statesman')

Whatever the number of a man's friends, there will be times in his life when he has one too few; but if he has only one enemy, he is lucky indeed if he has not one too many. —Bulwer-Lytton

* * *

Wise men profit more from fools than fools from wise men for the wise shun the mistakes of fools, but fools do not imitate the success of the wise. —Marcus Cato

A PLAN FOR NATIONAL INTEGRATION

By Dr. A. NARASINGA RAO

The object of National integration is to produce among the citizens of the Indian Republic a feeling of unity and kinship, a sense of pride in belonging to a great country and a determination to do one's utmost to remove want and suffering and to raise the level of life among the citizens both materially and morally.

It might at first appear that such a movement is unnecessary when the country has won freedom after a struggle and when independence has been already established. However, there are special factors such as the huge size of the country, the wide level of the cultures of its inhabitants ranging from hill tribes to highly civilised communities, the bewildering variety of languages and social customs, religious differences, etc. which make the passage from a feudal age to a modern democracy, a somewhat slow process. The feeling that India is a single country was perhaps present under rulers like Asoka and Akbar, but it developed into a powerful impulse only after the establishment of the Indian National Congress. It was further intensified by the freedom struggle under Mahatma Gandhi. This binding force which was due to the presence of the British disappeared with them and all the linguistic and other loyalties have revived after freedom was won. The first question to ask is: What are the forces which bind human beings together, and give them a feeling of oneness and stimulate them to noble efforts? The forces are partly emotional and partly intellectual. Secondly, how are human beings organised into smaller and bigger groups among themselves?

The smallest natural social group is the family consisting of the husband, wife, children and close blood relations. The binding forces are here instinctive and strongly emotional. It is a heritage from pre-human ancestors. Sometimes a tribe is merely an overgrown family tracing its ancestry to some remote progenitor.

Now loyalty to other members of the family may be considered to be a loyalty which competes with loyalty to the State and is therefore a rival to it. There are two ways of dealing with such a situation, the **jungle method** and the **civilized or democratic method**. The jungle method is to destroy all rivals and corresponds to what

some of the Moghul princes did, imprisoning or killing all brothers so that there are no rivals left. This is the method used by totalitarian countries, where the State combats the family loyalty by loosening the marriage tie, taking direct charge of children, indoctrinating them and encouraging them to spy on their parents and report against them for any utterances disloyal to the State. The wife also is encouraged to report against the husband, and the husband against his wife, and so on. The democratic method meets the situation by accepting family affection as natural and picturing the State as a fulfilment of the same idea with the State as a big family, with citizens who are as brothers and sisters and so on. Religion which also seeks a higher integration transcending the family, pays tribute to the family model by expressions like the "fatherhood of God and the brotherhood of man".

A number of separate families living in close proximity in the same village, sharing similar experiences, meeting often and dependent on each other constitute the next bigger unit. Here the ties are not only emotional but also intellectual and cultural such as common festivals and religious practices. The jungle method would seek to liquidate these ties by pooh-poohing religion and socio-religious practices, discouraging festivals and replacing them by national celebrations and so on. The democratic method would let these alone, not interfering with them and treating them as harmless manifestations in which the energy of the people finds self-expression.

The caste system is an inheritance from the past which served a useful purpose in its time by forging bonds transcending village frontiers and emphasising ideals of austerity and learning, chivalry, fair dealing and service. In their original forms they were craft guilds which helped in conserving traditional skill, gave a sense of unity and kinship and security to the weaker members, and a sense of pride in their work. Today with facilities for travel and Western education, their influence is fast disappearing. Where they survive it is in relation to marriages, inter-dining and religious observances which affect one's personal life and have no political significance. Even these are fast disappearing,

and the best way of dealing with them is to ignore them altogether, and not to use the jungle method against them as the Congress wishes to do. They would have long ago ceased as a political force, but the Congress Government itself took the false step of making an elaborate schedule of backward communities and forced them into the legislative bodies and important appointments by accepting far lower standards than for the other communities. Now it is good to give opportunities by way of educational facilities for those who are backward, and with these special advantages they must be encouraged to come up to the level of others and compete on equal terms with other communities for elections and appointments. To lower the standards for appointments and elections for particular communities is tantamount to saying "You are not quite fit, but we will take you and will willingly lower our efficiency because you belong to a particular community". Such an attitude demoralises the community and perpetuates their inferiority and removes all incentives for betterment. Once having committed this mistake, the Congress party found that it gave them the advantage of securing votes from these communities because of the special favour shown to them at the expense of the other communities, and so this relaxation of standards continued. It ill befits the Congress Government which started the communal game and is continuing it even today to throw up its hands in horror and decry communalism and casteism as anti-national forces!

My suggestion for dealing with casteism and communalism is to ignore them, and not give them a false importance by jungle warfare method. There is no need to amend the Indian Penal Code to make disturbances of communal harmony an offence, or to punish those who create disaffection on grounds of religion, caste or language. For, there are already provisions for punishing those who create disaffection or make disturbances. If a candidate urges communal considerations as to why he should be elected, let us educate the electorate to ignore such considerations and to consider fitness as the only criterion for election. There is no road to democracy except through the education of the electorate and the building up of a sturdy common sense.

A common language is a powerful aid

to understanding and therefore to sympathy, and in the British days, the Congress was keen on linguistic provinces. The States in India are now organised mostly on a linguistic basis and probably some more will follow suit. Fearing that provincial loyalty is a powerful rival competing against loyalty to the State, the present Government wants to eradicate it by jungle warfare methods. Now the power of speech is man's most precious possession and the gateway to all knowledge. And so, any homage paid to one's own language is something good, and the binding force of the mother tongue should be utilised in building up a strong nation, because it has its own value and need not conflict with loyalty to the State. To fight against it is both unnatural and foolish. One should rather try to canalise it and build up a sense of nationhood based on it.

Let me organise in each important village or town in every State groups of mature persons who understand the need for national integration. These clubs or "integration centres" will invite and offer hospitality to cultured persons from other States or linguistic groups to come and stay and mix with the local inhabitants, explain to them their own cultural achievements, their literature, art, and social habits; their own approach to similar problems, and generally point out how, underlying all apparent differences of dress, food habits and language, there is a deep unity in all fundamental matters. The guests including men and women will stay at least for a week, visit homes, address gatherings and generally promote mutual goodwill and understanding. This implies the existence in each State of mature persons who believe intensely in this integration work as a national necessity and are willing to devote a part of their time and energies for this purpose, by visiting centres in other States. All this may sound like propaganda, but there is really an essential unity in the culture of our land fostered by epics, pilgrimages, ideas like **dharma** which permeate all the linguistic cultures and this unity has only to be brought to the surface to be appreciated. Compared with the importance of the results to be achieved, the expenditure is very little and can be met from local collections supplemented by State and Central grants, and railway concessions. What is required is

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The Verbal Heritage

By P. R. KRISHNASWAMY

If two armies fight each other on a battlefield, the relics left on it later are of interest, and have sometimes attracted description by the pen of the novelist. The mingling of two different peoples, the conquerors and the conquered, as it must happen in the land of the conquered, leaves similar results. The British infiltration in India started in the 15th century. The Portuguese had preceded them, as throughout in the East. They built a considerable empire in India which was in decadence when the British began to raise their head. The Portuguese had assimilated numerous Indian words, and when the turn for the English assimilation started, it was not always clear whether it was an Indian or a Portuguese word which they absorbed.

The most fruitful period of Indian words being absorbed in English was naturally the early years of English settlement in India. The voyage to India took six months usually and sometimes longer. The settlers felt themselves cast permanently in the new country, so that they should adjust themselves to the environment in all ways. The air of superiority which they assumed after some time did not come to them at the beginning. They were humble suitors at the courts of various Indian Rulers, and when they acquired trading rights, their first anxiety was to engage interpreters, dubashes, who were dwibhasis or bilinguists. The dubashes survive today as Indian assistants in European trading houses, engaged in the business of exports and imports. The moonshee, teacher of languages, was employed by British officials, and he filled a humble place like the chaplain in the 18th century English noble houses.

The First Landing

When the British landed first in Madras, the "Katta-maram" was the first wonder sight to meet their eye. The log of wood, as it appeared, on which the Madras fisherman maintained his balance skilfully and rowed it up and down, gave an early word to English. In the hands of an English novelist the word acquired the metaphorical significance of a wily virago. "F.B.," the best friend of Colonel Newcome, can conceive no more disagreeable word than catamaran to fling on Mrs. Mackenzie.

As he landed ashore and walked along the English visitor was impressed by the buildings finished in polished lime, and the Tamil "chunnambu" became chunam in English. The house which lodged the Englishman was a bungalow, originally a light structure, so called because it was of a Bengali pattern. Bungalow has since meant a spacious building standing in the middle of a "compound," another Indian word. Bungalows and compounds are familiar in England now. Instead of walking, the English visitor might be carried in a "palankeen," an antique vehicle of transport, borne on men's shoulders. When wheeled carriages came into vogue, bandy was the English word from the Telugu "bandi." The "tonga" was a later innovation. Getting into the bungalow saw a huge "vantha" waving over his head, to keep the air cool.

Food Terms

Of words relating to food, "curry" may be reckoned first. It has a distinct Tamil flavour. Milgetawny, derived from Tamil "milaga-tannir," is peculiar to Tamil dietary. "Conjee," once familiar as food for the sick, is unluckily going out of fashion now. With "conjee" is associated the well-known story of British Indian history, of the sepoys under Clive who agreed to be content with the conjee in which the rice was boiled, leaving the rice to the European soldiers, at the siege of Arcot in 1751. The word rice comes from Tamil "arisi." Chapati and Masala were North Indian articles of diet. The story is told of a Governor-General who was obliged to live on this diet for a few days, at the end of which he remarked that chuprasis and masaljis were not after all such bad diet. A similar joke is about a "nabob" in London who wanting more curry shouted for more curries. Ginger is from Tamil "injee." "Gingeli" which yields oil is from a Hindustani word. "Ghee" is again Hindi. Arca, the nut chewed with betel leaves, is from a Tamil word, and betel is from Tamil or Malayalam "vettrilai." Indian dishes have lately come to the fore, and an English peer managing an Indian hotel is travelling all over India collecting recipes for Indian cookery and pickles. "Chutney" suggests the hot and spicy preparation and one Indo-Anglian poet entitled his collection of verse "chutney lyrics." "Sambar,"

"rasam," and "idli" promise to get well known in the world.

"Ayah," the child's nurse, may be from the Portuguese word, but the word is good Tamil meaning "mother." The Madras ayah attained great fame, and European ladies are said to have waited long in North India waiting for the Madras ayah. "Coolie" again is a good Tamil word meaning wage, but it is also from North India. India supplied coolies to foreign countries so long that we stood the danger of being dubbed a coolie nation and it has been providentially averted.

The useful cot is from Tamil "kattil." Teapoy is more interesting. So English in appearance it is really formed from "teen-pay" (three-legged) on the analogy of "charpay," the four-legged bedstead. 'Cheroot' and "lankah" are the Indian contribution to the smoking world. Abounding in land overgrown with shrubs and wild vegetation, India has supplied the "jungle."

Of animals, the bandicoot, from Telugu "pandi-kokku," is intriguing from the metaphorical application of it to a deep old schemer. Mongoose, which figures gloriously in Kipling's story, is from Telugu "mungisa." The driver of the elephant is the "mahout." Sambur and nilgau are of the deer species and maina a bird.

English idioms have likely developed on Indian originals. Currying favour with a superior is described as "crow-catching," an expression generally understood in South India.

The pariah as signifying the down-trodden community will be a matter of the past as "harijans" are shown preferential treatment. "Sudra" explained in the dictionary as the lowest of the four castes will have to be shown as the ruling caste in South India. The baniya, merchant and money-lending caste is known all over the world.

Sartorial Words

Of clothes peculiar to India, we may note that the "sari" has come into prominent recognition in the present century. "Jibba" was familiarized, among others, by H. G. Wells in his novel "Joan and Peter." Jodhpur breeches are known to the aristocratic class riding on horses. The "banian," worn next to the body is again special to India. Cummerbund, the sash round the waist, has lost its vogue. Bandanna is the

coloured and spotted handkerchief. We have fabrics made specially in India, mada-pollam, Surat, Susi and other fading names. The bangle is the Indian woman's ornament which is immortalized in Mrs. Sarojini Naidu's poem. Anicut and bund are Indian contributions to the world of irrigation. Mofussil, cutcheri, dak and other words pertain to official life. Ryot is peculiarly British Indian and it recalls the famous ryotwari system initiated by Sir Thomas Munroe. The pagoda marks the quest of the European in India, who came here to shake the "pagoda" tree.

The religious and philosophic words absorbed in English belong, of course, to the entire world. "Avatar" is the hopeful idea of divine incarnation, "mahatma" indicates the great souls who have become real, "nirvana" is the much discussed Buddhist goal, "Upanishads" embody the highest philosophic interpretation of the universe and "Vedanta" is the end of all knowledge. The "sanyasi" is an edifying ideal of India, in which it is given to man to renounce everything to go in search of the highest knowledge. The "yogas" practised by the "rishis" have caught the entire world, and the 'yogi' is a truly great superman. "Dharma" is an untranslatable word of a great ideal. "Karma" is the fundamental basis of regulating man's conduct. "Swastik" is the symbol of a soothing gesture. "Sati" signifies the woman who upholds the ideal devotion to her husband which survives death.

Political Sphere

From politics have emerged a procession of words. 'Swadeshi' was the weapon to teach the proud conquerors a lesson, 'satyagraha' was the weapon to humble tyrants. 'Hartal' was a minor event of popular protest against an unpopular act of the government. "Sutra" is a special Sanskrit creation to convey aphorisms. In a poem by Robert Southey professing to be based on Hindu mythology we get "glendoveer" which is meant to stand for "gandharva." Many other words in the poem are, of course, unrecognizably corrupted.

The words acquired by English during the contact of three centuries are really quite insignificant. This is due to the slightness of the contacts which were confined to business administration, excluding social and cultural spheres.

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Sudanese Nubia And African History

By JEAN VERCOUTTER

When the waters of the Nile rise after completion of the Aswan High Dam in Upper Egypt, a whole section of the Nile Valley—the ancient land of Nubia—will be flooded. Early in 1960, Unesco launched a campaign to save some of the most important monuments in the threatend area. Below, Prof. Jean Vercoutter, former Director of Antiquities in the Sudan and currently chief of the French Archaeological Mission to that country, describes the work being carried out in Sudanese Nubia and shows how archaeological exploration of this section of the Nile Valley may throw new light upon the influence of various civilizations in this part of Africa.

From November 1960 to March 1961, five archaeological missions have been carrying out excavations in the Sudan. From north to south, on the west bank, they are: a Polish mission at Faras, where important frescoes of the Byzantine period were discovered; a Franco-Argentinian mission at Aksha, where the Ramessid temple provided many inscriptions and fine bas-reliefs; a Spanish party at Argin, where work preliminary to excavation has been carried out; a British mission at Buhen, where a remarkable fortress built in the Second Millenium B.C. is being uncovered. On the east bank, a Scandinavian party (comprising Danes, Finns, Norwegians and Swedes) has explored the area extending from Faras East to the outskirts of Wadi Halfa. Necropolises dating back to the civilizations known as Group C (Third to Second Millenium B.C.) and Group X (Third to Fourth Century A.D.) have been located and successfully excavated. Finally, two epigraphists sent by Belgium have recorded the inscriptions of the temples at Semna.

This international effort is both gratifying and inadequate. Gratifying, because the Sudan had reason to fear that few countries would agree to send out archaeological missions without the inducement of attractive counterparts such as the United Arab Republic was able to offer (in some cases, complete temples). Inadequate, because when you take into account the enormous area to be explored, the effort is still very limited.

More than 380 square miles of practically unknown and rather inaccessible terrain in the Sudan will be covered by the waters of the new Aswan High Dam. Land surveys and aerial photographs have established that there are at least 100 important sites to be excavated in this area, and probably three times that number of secondary sites. Of the important sites, only ten have been explored so far, and these only partially.

Assuming that the construction of the dam will be carried out on schedule, only three years remain to finish exploration work and digging. In that short period, 90 sites should be excavated—30 sites a year—and 380 square miles of territory must be explored—about 125 sq. miles a year. Compare these figures with work carried out during the 1960-61 season when it was not possible to complete work on any of the four sites at Buhen, Argin, Aksha and Faras, and only 70 square miles were explored, hastily at that.

It is clear that if the number of missions is not multiplied by at least five in the near future, Sudanese Nubia will disappear for ever beneath the waters of the Nile without having been explored satisfactorily. From the view point of historical research, this would be a tragedy.

This part of Nubia straddles one of the main passages of the great north-south route which, throughout history, seems to have connected the Mediterranean coast of Africa with tropical and equatorial Africa. It is true that in remote prehistoric times the Sahara had a more humid climate, and did not form an obstacle to direct contacts between the north coast and the centre of the continent, as it does today. But it became a desert again—probably in the Mesolithic Age (8,000-7,000 B.C.)—and thereafter the Nile became the only safe route—where one was sure of not dying of thirst—between the Mediterranean and the great steppes of tropical Africa. Confirmation of this early travel was found at Abka, near Wadi Halfa, where prehistoric rock drawings were dated about 7,500 B.C. by the Carbon 14 method. The expert who studied the engravings at Abka considers that the rock drawings they resemble most closely in style are those in Spain. It is possible, therefore, that the Nile Valley served to connect Europe and Africa as early as the Eighth Millenium B.C. At any rate, there is plenty of evidence in support of this from the Fourth Millenium on-

wards, and the civilization known as Group A Culture, about which still very little is known, appears to have extended at least from the junction of the Blue and White Niles, that is, from present-day Khartum-Omdurman as far as Aswan.

From that time on, communications between Sudanese Africa and the Mediterranean were never interrupted. Each period of strong government in Egypt coincided with deeper and deeper penetration from the north into the south. The Old Kingdom (2800-2400 B.C.) reached southwards as far as the Second Cataract; the Middle Kingdom (2000-1780 B.C.), to the Third Cataract; and the New Kingdom (1580-1090 B.C.), to the Fourth Cataract, and probably farther.

Conversely, each period of weakening of power in Egypt coincided with a Sudanese thrust to the north. The Group C and Kerma civilization pushed northwards to the borders of Egypt from 2100-1800 B.C., and again between 1780 and 1680 B.C. And the brilliant civilization of Napata, whose centre was in Dongola between the Third and Fourth Cataracts, conquered Egypt itself, and only fell back under Assyrian pressure as far as the area situated between the Second and Sixth Cataracts, where it established the Meroitic Kingdom which lasted until the Third Century A.D.

But the story does not end there. The collapse of the Meroitic Kingdom was followed by a new wave of practically unknown African peoples who swept into Egypt coming from the south. Their conversion to Christianity in the Sixth Century A.D. was another episode of the north-south penetration, and from the Sixth to Thirteenth Century, Christian Sudan remained open to Mediterranean influences, both Christian and Islamic.

This interpenetration of cultures through the ages makes Sudanese Nubia intensely interesting to the historian. At all times, the Sudan section of the Nile Valley maintained links with civilizations we know well. At the same time, it witnessed civilizations about which we still know very little: the cultures of Groups A and C, of Napata, Meroe, Group X, and of the mediaeval Christian and Islamic periods. And these cultures, themselves African, were always in contact with tropical and, probably, equatorial Africa.

I have tried, in this short article, to stress the importance of Sudanese Nubia. Located south of the barrier formed by the Second Cataract, the area has always been more African than Egyptian. It was on its territory that the first African kingdoms, governed by Africans, were established: first the kingdom of Kerma, and later those of Napata and Meroe. The history of these ancient African empires is still practically unknown. Yet it could furnish the key to the ancient history of the whole continent. It is unthinkable, therefore, that archaeological sites so rich in possibilities should be allowed to sink beneath the waters without having been investigated thoroughly.

(UNESCO)

A PLEA FOR NATIONAL INTEGRATION

(Continued from page 714)

faith and energy, and if the scheme is worked intensely for five years, we may expect some tangible results at the end of the period. As the idea of the different provincial or linguistic groups as essential parts of the country as a whole permeates the masses, problems of linguistic minorities, additional State languages, etc. will get solved in a spirit of give and take. There is nothing wrong with our people. Independent India is still young and has yet to realise a sense of its own unity, and this takes time. The scheme outlined above will shorten this period of time.

Instead of spending our energies in decrying smaller loyalties which have their own place, let us rather concentrate on integrating the country at the linguistic or provincial level where it is weakest, and make our people realise that the obvious differences in dress, habits and language between those in different provinces correspond to the natural differences between brothers and sisters who are children of a common mother, and that we owe our loyalty first and foremost to our Motherland.

Just as communal or linguistic loyalties should not stand in the way of loyalty to the country, even so our loyalty to the State should not stand in the way of still higher loyalties such as loyalty to humanity as a whole, loyalty to *dharma* and loyalty to one's own conscience.

(Courtesy: 'Swarajya')

In Portugal's African "province", the black man is ruthlessly exploited, and just talking about independence can lead to prison.

ANGOLA

By Ernest Dunbar

Angola, Portugal's big African territory, stretches for 1,100 miles along the Atlantic below the Congo. It is fourteen times as large as Portugal itself. It is also the biggest paradox in Africa today. While Africans elsewhere are taking the reins of government from their colonial rulers, the black man in Angola is checked by a regime as ruthless as it is vigilant. Mere talk about independence can lead to years in prison. The regime bared its iron hand when it mercilessly quashed recent uprisings by opposition elements.

Portuguese officials in Lisbon had told me I would find whites and blacks living in harmony equalled nowhere else. They said no bars prevented Africans from enjoying all the fruits of Portuguese civilization. There was no clamour for freedom in Angola, they added, because Africans there already had their rights. What I saw in Angola was quite different. Instead of a bias-free society, I found a rigidly stratified people, topped by 200,000 whites and a handful of "assimilated" mulattoes. At the bottom are four million Africans, exploited and powerless. Instead of the "civilizing mission" by which the Portuguese say they are advancing a primitive people, I found exploitation. Africans are torn from their families and forced to labour under conditions that often lack even the most elementary humanity. Portugal avows a policy of racial equality. Yet it is sending thousands of white immigrants to Angola to settle on choice land from which Africans have been uprooted. The contradictions of Portuguese policy in Africa go back to its very roots. Portugal has been in Africa for 500 years. The Portuguese were the first Europeans to reach Africa, and the continent's coast line is studded with forts built by the heroes of that country's great maritime era.

Portugal claimed to be promoting culture and Christianity in Africa, but Angola was founded as a source for Portugal's lucrative slave trade. It is estimated that more than three million Negroes were shipped from Angola to the plantations of Brazil and North America before slavery was ended in Angola in 1850.

Even so, the Portuguese today point

with pride to the apparent lack of colour-consciousness in Angola. "That is because all the people of Angola consider themselves Portuguese," officials told me. "There are no race problems here". The same reason is given for Portugal's ability to hold on to its other "overseas provinces" in Africa--Mozambique, Portuguese Guinea, Sao Tome and the Cape Verde Islands. (In 1951, Portugal's colonies were officially designated "overseas provinces". The same status applies to Goa in India, Macao in China and Portuguese Timor in Indonesia.)

The 30,000 Angolans of mixed descent and the few "assimilated" Africans enjoy the same rights as Angola whites. But to become an *assimilado*, an African must be able to read and write Portuguese, agree to "live like a European" and pass a qualifying examination. And, since the children of whites and mulattoes get first call on the limited school space available in Angola, less than one per cent of its African population goes to primary school. As a result, only .7 per cent of Angola's Africans have become *assimilados*.

The requirement that an African must be literate, incidentally, contrasts with the fact that only about 50 per cent of Angola's white population can read and write (about the same rate as in Portugal itself).

There are further checks on nationalist sentiment. All the country's newspapers are heavily censored, as are foreign publications. An issue of an American news magazine was held up until a map showing the growth of independent African nations between 1950 and 1960 could be removed. Secret police keep a close watch on Africans and foreigners alike. And although many white Angolans are opposed to the regime of Portugal's long-time dictator, Dr. Antonio Salazar, they do not want to break with Portugal.

The African's duty to work is the keystone of Portugal's policy in Angola. It has led to abuses which were pointed out in 1951 by the Portuguese insurgent Henrique Galvao (who seized the liner *Santa Maria* in January). Galvao, who was formerly chief inspector for overseas territories, wrote: "forced labour in the Portuguese provinces is today indistinguishable from outright slavery."

The Lisbon government chose to jail Galvao instead of instituting reforms in Angola, but, according to many I have interviewed in that territory, the abuses are just as prevalent today. Africans are rounded up for private employers by professional recruiters, who threaten to have them drafted into the army or into government labour gangs for even lower wages than the nine dollars a month they receive from private employers. If there is a shortage of man power to fill a work quota, Africans are often taken from their homes and sent to distant labour gangs, even though they have already worked their statutory six months. The black worker is beaten by the Portuguese police at the employer's request and (although it is illegal) often by the employer himself. A wooden paddle, called the *palmatoria*, with holes designed to suck up the flesh upon impact, is a common instrument of punishment. The *palmatoria*'s victim is often disabled for days.

Forced labour is not confined to males. When a district tribal chief runs short of men for a work-gang quota (which it is his duty to fill), women and children are furnished, while Portuguese authorities look the other way.

A Lisbon intellectual told me, "A certain amount of brutality exists. We admit it. But in order to be brutal to someone, you must care about him. An African is like a woman. The more you beat her, the more she loves you".

Portugal, although under attack in the United Nations by Afro-Asian nations and regarded distastefully by its Western allies, intends to stay put in Angola. As a Portuguese colonial official said, "We do not intend to leave Africa. We're prepared to fight!"

The loss of Angola would be a crushing economic blow to Portugal. Angola and Mozambique jointly absorb 23 per cent of Portugal's exports and furnish it with valuable revenue from the sales of diamonds, coffee, sisal and minerals. Moreover, immigration to Angola serves as a relief valve for the grinding poverty and rising unemployment in Portugal.

A series of limited uprisings in Angola during the past two years have alerted the Salazar regime to the unrest there. The Portuguese have flown in thousands of white troops from Lisbon, hastily built air strips near the Congo border to accommo-

ate newly assigned fighter squadrons and beefed up Angola's internal-security forces. Angola's widespread secret police keep a wary eye cocked for dissidents, and Africans are prevented from gaining positions of leadership, even in non-political organizations.

The greatest threat to the Portuguese presence in Angola lies across the border, in the former Belgian Congo, where over 60,000 Angolan Africans have sought refuge. These exiles are openly plotting moves against the Salazar forces. In Guinea and Ghana, Communist-backed Angolans are working separately toward revolt. Poor in organization and, so far, receiving little except advice from other African countries, they are weak. But if the Congo crisis is resolved, and the Angolan revolutionaries are given arms and money, Portugal's 400-year rule in Angola may end in a blood bath.

THE VERBAL HERITAGE

(Continued from page 716)

What is the way to determine the assimilation of an Indian word in English? Its inclusion in an authoritative dictionary is obviously sufficient testimony. "Hobson-Jobson" which collects Anglo-Indian words and phrases cannot obviously be the touchstone. More than inclusion in the dictionary the use in a recognized work of literature should form the evidence for the adoption of a word. The use of the words in regions far away from India and England is good proof of the adoption.

While the Indian words absorbed in English may be traced with some definiteness, it is difficult to estimate the absorption of English words in Indian languages. If we follow the daily life of an inhabitant of India, we find numberless items absorbed from English in the Indian language. Even little children know the toothpaste, soap, cup, bathroom, light, switch, cycle, car, road, shop, time, watch, late and so on. But after the attainment of independence there has been a regular substitution of pure Indian words for many of the adopted ones. The English words which are considered indispensable remain. We have to wait and see the residue of English words left in the Indian languages. Once again we should look for recognition in the use of the words in literary works. It is literature that decides finally the words of a language.

Compulsory Military Training

By Gen K. M. CARIAPPA

Former C-in-C, Indian Army

I have been saying for quite some time since Independence that every able-bodied man of our land between the ages of 20 and 40 years must receive military training compulsorily. It is not to raise an army of millions to fight wars with bullets and bayonets but to fight many wars of other kinds on the economic, industrial, mental, moral and health battle-fields.

What we have been lacking in for some considerable time, and lacking very sadly, are mass discipline and a national character. We are lacking also in many other attributes of a good soldier quality of team spirit, loyalty, sense of duty, value of time, dignity of labour, selflessness, and a spirit of good fellowship, regardless of our communities.

All these qualities which are so essentially required in every man to build a nation of people of sterling character are developed in one by military training. Look at the difference between a soldier's way of life, and his way of doing things, and those of one who is not a soldier. They are as different as chalk from cheese. The former does things in a disciplined and orderly manner whilst not all of the latter do so, and our country needs people to work as soldiers do. It is for this reason that I have been for long advocating compulsory military training.

Civilian Use

Military training teaches one to obey and to command. It teaches one to lead and to be led. It teaches one to be prepared, to make any self-sacrifice, even the supreme one of being ready to give one's life, for a cause, to his people and to his comrades in arms. It teaches one to place service above self. To the soldier it is duty first and then his food and rest and so on. He does not go in quest of opportunities to gain personal power, nor to amass wealth, both of which, alas, are the real curse of our land today. Instead he goes in quest of opportunities to serve his people and his country in the noble career he has voluntarily chosen to serve in.

I know this compulsory training will take time to complete—and it will cost a fortune, but look at the rich dividends the nation will get from a disciplined people

working in farms and factories and in other vocations in the huge machinery of India's life. Man will then have the qualities of a good soldier, and these qualities will goad him to get on with his work instead of just talking. It will make him put duty first and then personal comfort, to think of country's progress, subordinating his own personal gains. The output in our factories will treble or quadruple, the produce in our field will leap forward, the transactions in business, the civil administration of the country and of a host of other human activities in this glorious adventure of nation-building work will be galvanised.

There will be less corruption and less nepotism. Men will move about like men should do, and there will be no idle lounging and hanging about during working hours for coffee and tea breaks and gossip. Every one will be hard at work. The atmosphere will be vibrant with activity. This is not a mere fantasy, it is reality.

A Ten-Point Programme

The kind of military training and not military service I am thinking of is not to teach men to drive tanks, fire guns, and shoot rifles in peace time. That is the job for our regular soldiers, sailors, and airmen, but the shape of training I visualize embrace the following.

1. Put all such people into some kind of military uniform. It is amazing how a man throws his chest up the moment he gets into such a uniform.
2. Put them through rigorous barrack square drill.
3. They should do guards and sentry duties by day and by night.
4. Camp life—pitching and striking tents, loading and unloading transport of all types, digging, cleaning up camps and so on.
5. Do some toughening exercise.
6. Long distance marches progressively raised to, say, 20 miles a day on occasions, on reduced rations.
7. Handling and firing, revolvers and rifles.
8. Vehicle, man and equipment management.
9. Play team games.

10. Take part in community singing—singing songs raise one's spirit and morale.

The initial training would be for three days in the week at 5 hours a day finishing up with a ten days' camp living in bivouacs and tents, when every one will fire five rounds of ball ammunition with his rifle and revolver. Thereafter on the last Saturday of every month for a half day doing general training—marching ceremonial, bayonet fighting and so on for one year.

I know this will be a gigantic undertaking for any country, but it has got to be done to stir up and awaken the sleeping real man in our people to help get a virile nation to build up India more rapidly and more profitably and all-round to form a reserve of disciplined and tough men ready to take up arms in time of threats to our national security to defend our frontiers and our independence against unprovoked aggression.

As a subject race for a long time we have lost our initiative and the spirit of enterprise and adventure. We want everything done for us by some one else, more often than not by the Government. It is from this lethargy that we must be woken up or else we will be left far behind in the race of progress in this highly technical and scientific world of today. Military training will do this waking up.

So let us give this matter of national importance a serious thought. This training will be carried out on a carefully worked out phased programme. It may take some five years or so to get through the first round, but it has to be got through. A small high-powered committee of some active and earnest-minded persons could make a thorough study of this matter and prepare a national plan.

VOCABULARY TEST

(Continued from page 725)

military advantages; as, **terrain** adaptable for defence.

17. **Mercurial**—D: Quick-changing; volatile; lively; as, a **mercurial** disposition.

18. **Junta**—B: Governing committee; as, a military **junta** has seized power.

19. **Autocracy**—C: Absolute rule by an individual.

20. **Riddle**—D: To fill with holes; perforate; as, to **riddle** an argument.

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The Language Problem

By Dr. Harekrushna Mahatab

Language is one of the integrating forces of a nation, but unfortunately it is tending to be a disintegrating force in India. I think the time has come when the whole policy regarding this problem has to be reviewed.

At present more stress is being laid on the State languages than on the national language, perhaps because Hindi which has been provided in the Constitution as the national language is not acceptable to all sections of the population. If English could be accepted as the additional national language for such time as will be necessary for Hindi to be generally acceptable, the problem could be easily solved. But that is not happening. On account of this dispute over the national language, the stress has shifted to the State languages. Obviously a State language cannot take the place of the national language. No State can either linguistically isolate itself from the rest of India or be wholly homogeneous linguistically. Linguistic minorities are and will be in every State; however, the boundaries of a State may be demarcated accurately and the problem will be more and more acute as industrialization goes on, and industrial population grows in every State. Besides, each State will have to deal with the large number of employees of the Central services and of the State services who hail from other States. From all these points of view it is not easy to enforce a State language in a State nor is it easy to devise a suitable formula to meet the requirements of the linguistic minorities if any State wants to enforce its State language.

Why is this insistence on the State language? A language for its development depends on the literature it produces. Education at the primary stage has to be imparted through the mother tongue. As a vehicle of communication a language, which is known to the bulk of the population, has to be used. A person seeking service in a State has to know the language of the bulk of the population of the State for facility of work. All these are agreed.

The Danger

The crux of the question is whether at the Government level the State language should be used to the exclusion of all other languages. From many practical points of

view it is the national language which should be the language at the Government level, in High Courts and in universities; otherwise there is the danger of India being perpetually divided linguistically.

Inter-communication among the States, exchange of students and teachers among universities, contact among the High Courts and the Supreme Court, all these are essential for the integration of the nation. So long as Hindi is not acceptable to all the States, English has to continue for the purpose of inter-State communication at higher levels.

Then the question is in which language communication inside the State between departments of the Government and between the Government and the people should be carried on. For inter-department communication, there is no escape from the national language in the long run and English for the time being, for officers of higher rank are not all from the State and also inter-department communication is linked up with communication with the Centre and other States.

Having accepted the position that for all inter-department work, the national language or English for the time being is to be used, there is no difficulty in communicating with linguistic minorities in their own languages at local levels. There are provisions in the Civil Procedure Code and in the Criminal Procedure Code empowering the State Government to determine what shall be deemed to be the language of each court within the territories administered by such Government.

It is interesting to note that in 1949 the Government notified in the Delhi Gazette that Hindi with Devanagari script should be an additional court language for all criminal courts in Delhi province. In many States there are more than one court language for the convenience of the linguistic minorities. For the education of children, the Government of India has already made adequate provisions for the convenience of the linguistic minorities. Similarly, the Government may determine in what language correspondence with panchayats of particular areas will be carried on. All these are feasible and practical.

Teachings of —

MAHATMA



GANDHI

Q. What place will the world ultimately assign to Gandhiji?

Ans. "Beauty", sang a poet, "is in the beholder's eye". Likewise the message of a great teacher reaches only the hearts which are prepared to receive it. So it was with Gandhiji's teachings in his lifetime. So it is now after his death. It is rightly said that it takes a hundred years to discover a great man, another hundred to understand him and still another hundred to put his teachings into practice.

It is an accident of history that Gandhiji identified himself with the freedom of India. His ultimate object was freedom of the world—freedom from war and violence, from the greed and aggressiveness, from passions and prejudices that have destroyed nations. It sounds paradoxical that a lawyer by profession, he glorified in being a lawbreaker; a caste Hindu by birth he identified himself with the cause of the untouchables; a Bania by caste, he fought with the valour of a Kshatriya and taught with the skill of a Brahmin. His whole life indeed was an unbroken record of a search for Truth.

As a world teacher, world citizen and prophet of spiritual regeneration of mankind, Gandhiji ranks high among the saviours of the human race. He battled almost single-handed against the massed forces of evil, reaction and fanaticism, and pulled the tempest-tossed bark of Indian nationalism to peace and safety. Undeterred by threats and opposition, by misrepresentation and slander, he stuck fast to the anchor of truth and non-violence and beckoned his erring brethren back to sanity and love. He courted martyrdom with the name of God on his lips and the smile of love on his face.

The world has produced many men with keener intellect, but few with a kinder heart. Herein lies the secret of Gandhiji's greatness. Imagine for a moment a world in which Buddha, Christ, Mohammed, Zoroaster and Gandhiji were not born! What would have been our civilization like in the absence of these great souls? The ashes of empires are scattered to the winds

in the remorseless march of time, but the great guides and teachers shine as beacon-lights through eternity. They have loved what is right without expectation of reward and have hated what is wrong with utmost courage of convictions.

Though it is impossible for anybody to pry into the future, yet it can be safely conjectured that the centuries will hold an imperishable record of Gandhiji as one of the greatest guides, teachers and benefactors of mankind. Kings and captains come and go, governors and patriarchs are forgotten empires rise and fall, but the message of the mahatmas live for ever, enshrined in the hearts of men, revered generation after generation through all time.

Q. In what respect Gandhiji's technique of self-starvation differs from the Western Propaganda. What was the guiding principle of Gandhiji's life to stand against the criticism of his ideal.

Ans. Gandhiji's technique of self-starvation differs in a very important respect from that of Western Propaganda. The performer tries to rouse the community to face the situation by the thought and the spectacle of his own suffering. The technique is based on the principle of suffering and the purifying effect of vicarious suffering on the emotions of others. It has the same purifying and ennobling effect which high tragedy has in accordance with the Aristotelian definition.

Gandhi has been charged with the impracticability of his ideals by the moderates, with the moderation of his programme by the extremists, with inconsistencies of conduct by both; and in the midst of these conflicting assessments and appreciations of his life and work, he has stood unmoved like a rock and allowed the flow of praise and blame to pass him unaffected. The one guiding principle of his life is the verse in the Bhagavadgita which says:

"Happiness and misery, gain and loss, victory and defeat—do thou treat them alike and gird thyself for battle. Thus wilt thou not incur sin."



VOCABULARY TEST

(This group of words is selected from newspaper editorials discussing national affairs. Tick the word or phrase you believe to be nearest in meaning to the key word and then compare your answers with the correct answers given afterbelow)

1. **Protocol**—A: unprovoked attack. B: aggravation. C: violation of a treaty. D: rules for diplomatic etiquette.
2. **Bicameral**—A: secret. B: judicial. C: having two chambers. D: disputed.
3. **Pending**—A: bending over. B: waiting to be decided. C: ending. D: relying for support.
4. **Autonomy**—A: self-government. B: dependent state. C: dictatorship. D: nation ruled by a clique.
5. **Precursor**—A: attacker. B: pursuer. C: forerunner. D: torturer.
6. **Perfunctory**—A: half-hearted. B: prompt. C: thorough. D: stem.
7. **Repugnant**—A: plain. B: repulsive. C: brutal. D: impudent.
8. **Chauvinism**—A: blind patriotism. B: political trickery. C: buffoonery. D: defeatism.
9. **Stigma**—A: obstinacy. B: bad vision. C: mark of disgrace. D: honour.
10. **Chide**—A: to make fun of. B: rebuke. C: cheat. D: flatter.
11. **Anarchistic**—A: out-of-date. B: clumsy. C: despotic. D: lawless.
12. **Internecine**—A: uncompromising. B: deadly. C: peaceful. D: faithful.
13. **Signatory**—A: signer of a document. B: outstanding statesman. C: agreement. D: conference.
14. **Secede**—A: to shrink back. B: withdraw formally. C: shut away. D: assent to an opinion or policy.
15. **Onus**—A: sadness. B: happiness. C: criticism. D: responsibility.
16. **Terrain**—A: soup bowl. B: path. C: tract of land. D: wall.
17. **Mercurial**—A: clownish. B: heavy. C: mechanical. D: quick-changing.
18. **Junta**—A: sailing vessel. B: governing committee. C: a philosophy. D: nobleman.
19. **Autocracy**—A: self-governing community. B: mob rule. C: absolute rule by an individual. D: government by ecclesiastics.

20. **Riddle**—A: to entangle. B: question. C: explain. D: fill with holes.

ANSWERS

1. **Protocol**—D: Rules for diplomatic etiquette and ceremony; as, seated according to **protocol**.
2. **Bicameral**—C: Having two chambers or assemblies; as, a **bicameral** legislature.
3. **Pending**—B: Waiting to be decided; imminent; as, **pending** legislation.
4. **Autonomy**—A: The power, right and condition of self-government; independent.
5. **Precursor**—C: Forerunner; that which precedes an event; as, a **precursor** of revolution.
6. **Perfunctory**—A: Half-hearted and indifferent; done merely as a duty; as, a **perfunctory** ceremony.
7. **Repugnant**—B: Repulsive; disagreeable; distasteful; as, an act **repugnant** to humanity.
8. **Chauvinism**—A: Blind and exaggerated patriotism. From Nicolas **Chauvin**, a veteran French soldier who had an uncritical and unbounded admiration for Napoleon.
9. **Stigma**—C: Mark of disgrace; blot on one's good name; as, the **stigma** of treachery.
10. **Chide**—B: To rebuke; scold; find fault with; as, to **chide** a person for ineptitude.
11. **Anarchistic**—D: Lawless; pertaining to the doctrine that all government is evil; as, **anarchistic** theories.
12. **Internecine**—B: Deadly; bloody; mutually destructive; as, **internecine** warfare.
13. **Signatory**—A: Signer of a document, such as a treaty.
14. **Secede**—B: Withdraw formally; as, the new state is to **secede** from the Commonwealth.
15. **Onus**—D: Responsibility; as, the **Onus** of firing the first shot.
16. **Terrain**—C: Tract of land; especially a region considered with reference to its

(Continued on page 722)

QUESTION BOX

In these columns we answer the queries from our readers. It may not be possible to answer each and every question but a considered reply is given to the selected questions. Personal queries should not be asked. Letters from our readers are welcome. These should be addressed to the Editor Question Box.

Q. What is an Estimates Committee? What is its function? (S. S. Pandit, Nagpur)

Ans. Amongst other Committees, such as the Public Accounts Committee, the Committee on Government Assurances and the Committee on Subordinate Legislation etc. the Estimates Committee is an instrument, so to say, for exercising control on the Executive of the House of the People.

The function of this committee, like that of Public Accounts Committee is to maintain effective parliamentary control over government expenditure. These two committees act as watchdogs of Parliament over the financial aspects of public administration.

Q. What is the Sound Barrier? (K. C. Guha, Nellore)

Ans. Actually there is no such barrier. The term is a leftover from the days when it was feared that aircraft would not be able to fly faster than sound waves (around 750 m.p.h.) and that an aircraft trying to cross this limit of speed would come up against some mysterious obstacle. The term is relevant today only in the sense that when an aircraft approaches the speed of sound and crosses it, there is heard what is called the 'sonic bang'. After the sonic "barrier" has been passed, the aircraft will fly faster than sound when there are no disturbances to be piled up, nor will the sound waves of the approaching plane reach a listener earlier than the plane itself. Therefore, supersonic aircraft cannot be heard approaching.

Q. Is there a disease known as beriberi? What causes it and what are the symptoms? (B. B. Mehra, Secunderabad)

Ans. Yes. Beriberi is a deficiency disease due to dietary lack of Vitamin B₁. Beriberi has been known for centuries in the Orient, wherever polished rice is the staple diet. It is still a major cause of

death in China, Japan and Brazil, the Philippines and Indo-China. In the United States it occurs chiefly in alcoholics who obtain most of their caloric requirements from alcohol and consequently eat a poor diet.

The symptoms of beriberi are referable to the nervous and cardiovascular systems. The common manifestations are multiple neuritis, localised areas of altered skin sensitivity to touch in the extremities and pain on pressure over large nerves. There is gradual loss of muscle strength, which may lead to paralysis of a limb. The cardiovascular symptoms and signs are enlargement of the heart, increased pulse rate, palpitation and edema. If the edema is very extensive, the condition is called wet beriberi.

Q. Will you please give some details about 'Polaris'?

(Krishan Mohan Ganguli, Patna)

Ans. Polaris is the highest star in the constellation Ursa Minor, commonly called the North Star, or Polestar. It is a yellow star of the Cepheid type whose light varies from magnitude 2.08 to 2.17 in a period of 3.97 days.

In 1947, Polaris was only slightly less than 1° from the celestial pole. It will continue to approach the pole until about A.D. 2100, when it will appear only about 0.5" from this point, there is a ninth-magnitude star nestling almost in the rays of Polaris as seen through small telescopes.

The distance to Polaris is not accurately known because this distance is so great that the trigonometric parallax method becomes uncertain. According to Dr. S. A. Mitchell, the best value of parallax is $+0.03'' \pm 0.004$. Ignoring the probable error, which is greater than the parallax, this is equivalent to 1086 light years.

STUDENT'S EMPORIUM

RULES FOR GOOD CONVERSATION

Conversation is an art. But who can tell the point at which craft ends and art begins? There are techniques which will make you a better conversationalist.

Here is a blue-print containing seven rules which, if put into effect, will improve your conversation in a very short time.

1. Cultivate interest in others: Interest and consideration for the person with whom you are speaking, is essential. Your whole attitude must be one of helpfulness and linking for the other. You must want him to like you.

Conveying liking is more a matter of feeling than of words. As William Hazlitt says, "Desire to please and you will infallibly please."

You must wear an approachable expression. If your facial expression is frank and agreeable, and your attitude one of friendly interest, others will respond to the warmth of your personality.

When you say "How are you?", try to say it with feeling—in your eyes, in your voice, in your handshake. Of course, you do not expect a detailed account of the other's health, but you are showing that you are interested in him as an individual.

Likewise, if you say "I'm glad to see you!" in the same manner you make the other feel that he is appreciated and that you like him.

Always remember that an interested person is an interesting one.

2. Talk in terms of the other's interests: This is one of the most important principles. Put yourself in the other's place. What are his interests? What does he enjoy talking about? What gambit will bring a response from him.

Memorise the words of Dale Carnegie: "The royal road to a man's heart is to talk to him about the things he treasures most."

In everybody you will find a response to something. A mother will talk readily about her children. A youngster will tell

you about his favourite sport. A stranger will talk about his homeland.

3. Use method in finding the other's interest: Almost as important as being able to speak on another's interest's is knowing how to find them.

You may ask, without being personal, such questions as "Have you seen the new repertory company?", "What did you think of last night's television play?", and "Do you fancy the chances of the English team?"

Openings on these lines will evoke some response—or indicate that you are still off the target. Your judgment will improve with practice, and after a time you may find that you can gauge a stranger's interests with accuracy.

Hobbies are a fruitful source of conversation, as are holidays, especially unusual ones. The recounting of an interesting or amusing experience is sure to bring a recital of a similar one from your companion.

Never ask a direct question on a technical subject unless you know your companion to be an authority, for if he cannot supply the correct answer he will feel uneasy and humiliated.

Many people speak without any distinct idea of their purpose. When you say "Do you think it will rain today?" Your remark should be purposeful. It may be to put another at ease, to begin the conversation, or merely to let the other know that you are a friendly person.

4. Learn to classify different kinds of conversation: Obviously we do not always converse with the same type or number of people. Take the most common situation. You are with one other person and you wish to converse successfully with him.

There are advantages. You do not need to consider the effect of your words on a third party; there is less competition; and you can be more relaxed than you are in a group.

On the other hand, there are corresponding disadvantages. One of you may

have all the talk; the very intimacy of the conversation may lead you into saying something which you did not intend to reveal; what you say must have greater significance and it follows that the thoughts you express must be less superficial.

When two people are talking together, the subject invariably returns to the persons concerned, resolving into a mutual exchange of experiences and opinions. In a two-way conversation, aim at achieving concord and mutual appreciation.

In a group or company, conversation is generally impersonal on such subjects as sport, the arts, science, history and day-to-day events.

Topics should be pleasing to everyone. Nothing should be said which would give offence to any person present. The conversation should never be allowed to develop into a debate or a lecture.

Again, though there should be a certain amount of friendly give and take, the overall atmosphere should be one of harmony.

5. Gather material for conversation: Your conversation will not be entertaining unless you have a stock of ideas and information.

Here the world is open to you. Always read the newspapers. From them you will find the titbits of conversation.

Take a good weekly journal. The articles by well-informed writers will keep you up to date on current events, and the criticisms will whet your appetite for the new books and the latest plays. Often too, there are knowledgeable articles on painting, music, sculpture and contemporary art.

But don't get too serious. Remember that for every person who is interested in Bach, there are a thousand interested in Bolton Wanderers' chances for the football cup or in the Sussex cricket record.

Try to associate all you read with your own ideas and experience. You are an individual, quite unlike anyone else in the whole world, and consequently when you say something which you have thought out for yourself it will at least be original.

6. Take prompt action to deal with the embarrassing silence: The silence which seems to go on and on is a direct menace to conversation.

The silence can arise for three reasons: it may be a genuine creative silence, a pause for reflection; it may be that no one has anything to add to the subject; or it may be that everyone has the same thought which they do not wish to express.

Whatever the cause, take immediate action. Even a creative silence—unless you are with people whom you know well—may be misunderstood.

Never, never, draw attention to the silence. Rather, turn at once to the person next to you and ask him a general question. "What did you think of the new film?" This will start the ball rolling again.

7. Learn how to guide the conversation: It only takes one person to rescue a conversation from banality and guide it into more interesting paths. But you should be tactful in this.

If you do change the subject, make certain that the change is for the benefit of the conversation as a whole and not just because you want to talk about, say, the fine bloom of roses you have this year, or some other subject near to your heart.

If the topic is really interesting and everyone enjoys talking about it, you will find that it will go on being fed by ideas until everyone has had their say.

You will become expert at guiding the conversation if you practise. Try to draw out the shy people.

Try to make dull topics creative. Try to be positive, and keep conversations happy and cheerful.

Conversational skill cannot be acquired in a day, but if you build on these basic rules you will make steady progress. And you will find that in the process life itself has become more interesting and more significant.

(By Charles Manning in 'Psychologist')

DIFFERENT FROM or DIFFERENT TO?

Most prepositions such as **look at**, **look for**, **look up**, **look out**, convey a distinct and different meaning, but sometimes a phrase may have more than one shade of meaning:

"She looked through the records."

"She just looked through me."

In each of these simple sentences, the words **looked through** convey a completely different action, yet from the context the

meaning is perfectly clear. This is just another illustration of the flexibility of language.

There are, however, a few occasions when we may hesitate over which preposition to use. The purists still decree that we should always write **different from** and never **different to**, as this word begins with a variation of the prefix **dis** which implies separation. They also insist that we should say **divide between** only when dealing with two items, as **between** comes from the same root as **twain** and really denotes **two**. If more than two subjects or people are involved, then we should say **divide among**.

"The sweets were divided between the two children."

"The apples were divided among the four boys."

To **consist of** means to be made up of (various parts), e.g. "Our dinner consisted of three courses". To **consist in** means to have the essential ingredient, e.g. "His achievement consisted in solving this problem."

To **compare** anything to something else is to point out a likeness, as in: "His music is compared to Mozart's." But to **compare with** something is to imply a critical study of two things, e.g. "I compared the translation with the original."

Depend and **rely** must be followed by **on** or **upon**. It is not correct to say: "You can depend (rely) that this will be done." but "You can depend upon it that this will be done."

* * *

NOUNS WITH NAMESAKES

Countless Place names are based upon common nouns of ancient origin—words meaning camps, river crossings, etc., but there are also many examples where the places of origin of certain products have entered into our language as everyday nouns.

Some well-known illustrations of this are names of drinks. **Port** is a wine produced near **Oporto**, a wine-shipping town in Portugal, while **sherry** is made in the district of **Jeres** in Spain. **Champagne** was called after the appropriate wine-producing province of France.

Passing from wine to fruits, we have **currants** derived from the Greek town of **Corinth**, and a damson is the plum of **Damascus**—the same city which gave its name to the patterned material **damask**.

Another fabric named after a place is **calico**, a fine cotton cloth from **Calicut** in the East Indies, while the coarse linen known as **holland** came from the country of that name.

Other lands which have passed on their own names to products are **China**, where the fine porcelain ware originated, and **Turkey**, by way of which country the farm-yard bird was first brought to Europe—as was also the blue stone known as a **turquoise**. **Gypsies** were so called because they were probably a wandering race of Indian descent. From India, too, we borrowed **jodhpurs** for riding breeches, from the town of **Jodhpur**.

Words derived from place names are not always nouns. We have **sardonic**, meaning sneering and cynical, or referring to a mirthless laugh, which is believed to relate to a **Sardinian** herb said to contort the face by its bitter taste when eaten.

Another interesting word is **canter**, a contraction from **Canterbury** pace, in allusion to the leisurely rate at which the pilgrims rode on their journey to that historic city.

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WORDS CHANGE WITH TIME

The meaning of many words tends to change with the passage of years, and it has been said that this is more so with English than most other languages. In a talk broadcast recently by the BBC the biographer Maurice Cranston instanced the word "indifferent" as it occurs in the sixteenth-century prayer still used in the Church of England which petitions God that the King's—or Queen's—Council "may truly and indifferently minister justice". In that context it is, of course, used in its original meaning of "impartially," whereas the general twentieth century sense means "half-heartedly" or "only moderately well."

Thackeray's collection of humorous essays called 'A Book of Snobs,' and published only about a hundred years ago, provided another example. In Thackeray's day a "snob" was just a "fellow" or "chap", and was in fact a Cambridge slang word for "any Tom, Dick or Harry." It had nothing to do with the modern meaning of the sort of person who looks down those less fashionable or well born.

Quoting another instance, Mr. Cranston said that nowadays everyone was rather

flattered to be called "liberal" whether his political views were Right or Left. But it was not always such a nice name. In *Othello*, Desdemona says of Iago: "Is he not a most profane and liberal counsellor?" In doing so she was not asking if Iago was not a broad-minded, freedom-loving counsellor; she was asking if he was not a licentious and immoral counsellor. For that is what the word 'liberal' meant in sixteenth-century England.

It did not become current in political discourse until the early nineteenth century, and even then the progressive party did not in the first place call itself liberal; they were called liberals by their opponents. In fact, they were called "liberales"; and the Spanish form of the word was used with the intention of suggesting that the principles of those politicians were alien and un-English. By that time, however, there had grown up a secondary sense of the word "liberal" meaning "generous, open-handed, bountiful"; and because this connexion had given the word an altogether more pleasing emotive tone, the progressive party decided to take advantage of the name, and rejoiced henceforth in being liberals.

Some changes in language reflect changes in the way of living. For instance the word "spinster" still in common use today to denote unmarried women, dates back to the time when the prime task of every woman without a husband and children to care for was to spin. Similarly the female line of a family is still referred to as the "distaff" side, although it is doubtful if many women would recognize a distaff if they saw one.

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GUIDE TO CAREERS: THE ZOOLOGIST

Zoology is the science of animal life and along with Botany constitutes the science of Biology which deals with all things having life. It includes studies of single-celled creatures like amoebae and blood parasites, sea animals, insects, frogs, fresh water and marine fishes, reptiles (including snakes and lizards), birds and mammals from mice to men. The study of Zoology helps us to stop the destructive types of life and to cultivate good ones.

The Zoologist's work will differ according to his field of employment and

specialization. The College lecturer (reader, professor etc.), will have to keep himself acquainted with the latest text books and published research on the subject. He may also carry on research in his field. These will be largely laboratory studies dealing with fundamental aspects. On the other hand the Zoologists employed in Research Institutes must devote most of their time to fundamental and applied research on the subject and may occasionally take part in imparting training to students where such facilities exist. In all major institutions there are a number of Zoologists each pursuing a specific aspect of the subject. Some conduct laboratory studies while others may pursue field studies. Field studies form an essential part of the research of a Zoologist—for instance an Entomologist has to devise control measures for crop pests, pests which destroy stored grains, cash crops, leather, hides, clothes, timber, etc., and forest pests, and the insects (mosquitoes, flies, fleas, lice) and other creatures (ticks and mites) that carry human diseases like malaria, filaria, cholera, dysentery, plague, typhus and relapsing fevers.

Before taking control measures the identity of the insects will be established by a Systematist, the life history, habits, seasonal prevalence, favourite haunts of the pest concerned have to be investigated by the Entomologist and the methods of control to be decided upon. The Toxicologist will determine the dosage, the chemical to be utilised and the mode of application in case of control by chemicals such as DDT, BHC, etc.

In the field of fisheries, a Zoologist may be designated as an Ichthyologist, fresh water Biologist, Marine Biologist, Fishery officer, etc. He must know the life history of fish used for human food so that safe fishing seasons can be established. He is to devise means to increase the catch of fishes, to improve their weight and fertility. In the man made hatcheries, he has to promote economical and scientific methods of feeding and control bacteria which affect the fish population. He may be also associated with the marketing of fish. Besides fish, such officers may be asked to undertake similar work in connection with other water creatures such as prawns, lobsters, etc.; which form human food.

Birds are an interesting group. Some

of them are crop pests while others eat harmful insects. An Ornithologist may be required to study the habits, food requirements, seasonal migration, etc., of the birds of his locality. He may also devise means to control the harmful ones and to preserve the rare and useful types.

A Zoologist should have sound basic knowledge of his subject, should be familiar with the area of work and its problems and should know the latest methods of control for a particular pest. He has to be in constant touch with his headquarters to learn about the latest methods used to solve a particular problem.

A Zoologist may undertake studies of higher animals commonly treated as wild life. Some of the wild-life animals serve as carriers of human disease. Therefore the knowledge of these animals is essential for human welfare. There is also a Veterinary Zoologist, Helminthologist, Entomologist or Protozoologist. In addition a Zoologist may work as a Superintendent either of a Zoological Garden (Zoo) or of a Museum dealing with preserved collections of animals.

THE PERSONAL QUALITIES required for success as a Zoologist are various. The research work demands a critical and analytical mind, studious habits, precision and acuteness of observation and a fund of patience and perseverance. The field work involves ability to regulate life and do hard work under trying conditions, as well as resourcefulness, judgement and tact. For administrative work, a person should have executive ability and a capacity to imbibe ideas and take quick and correct decisions. Extension work involves direct contacts with people and requires tact, a helpful nature, a sympathetic attitude and a friendly approach to the public. For any work in Zoology, a genuine interest in animals and animal life is essential.

TO QUALIFY as a Zoologist sound knowledge of chemistry and physics is essential.

The subject of Zoology is usually taught in the secondary and higher Secondary schools. The study can be continued at the Intermediate stage, when it can be taken up along with Botany. It can be offered as an independent subject in the B.Sc. degree course in our universities.

Zoology, and some of its important branches like Systematics, Ichthyology, Entomology, etc., also form an important part of syllabi in the degree and post-graduate courses in agriculture, medicine and veterinary sciences, etc.

Specialisation in Zoology really begins at the B.Sc. (Hons.) or M.Sc. stage. The former is a two-to-three year course which is available in most Indian Colleges. The condition of eligibility for admission is a pass in Intermediate Science (physics and chemistry) or an equivalent examination, with good results, and usually with Zoology as a subject or as a part of a Science subject.

The post-graduate M.Sc. course is of two years' duration and those who have passed the B.Sc. (Hons.) degree examination are eligible for admission. Both at the B.Sc. (Hons.) and M.Sc. degree level, persons should take up subsidiary subjects, appropriate to their particular interest and the field of their future employment.

The syllabi for B.Sc. (Hons.) and Masters' degree courses consist of theoretical and practical teaching in subjects like General Biology, Zoology, Entomology, Fishes and Animal Physiology, Parasitology, Cytology, Genetics, Ecology, etc.

OPENINGS for Zoologist exist in research laboratories, government departments, and teaching institutions. Under the Union Ministry of Food and Agriculture and Health, and under the State Government Departments of Public Health, Agriculture and fisheries, they find employment as technical/cataloguing assistants, field entomologists, fishery inspectors and fishery superintendents, etc. In the teaching line, high and higher secondary schools, colleges and universities offer posts of teachers, demonstrators, lecturers and readers. In the research laboratories and institutes, under the Union and State Governments as also under private undertakings, they are employed as research assistants and research officers. The Central and State warehousing scheme offers employment as Technical assistant-cum-Grader and Agricultural Entomologists. Some private firms, manufacturing insecticides and agrochemicals, also employ entomologists for conducting research and demonstrating the use of chemicals. The Ministry of Defence employs some Zoologists in connection

with "fouling organisms" which affect the efficiency of ships.

ENTRY into the profession is usually at the level of posts of teachers, demonstrators, lecturers, research and technical assistants. Such posts are either filled through Employment Exchanges or directly by the Employing departments in response to newspaper advertisements.

PROSPECTS FOR ADVANCEMENT to senior posts are either by promotion from the lower ranks within the department, or by selection through the state and Union Public Service Commissions for which candidates with post-graduate qualifications and adequate experiences are usually eligible. In research establishments promotion is to the posts of assistant research officer, Junior and Senior research officers, assistant directors, etc. In the teaching line, promotion is to the posts of professors, readers and the heads of departments. In Government Offices, promotion is to Class II and Class I posts.

EMPLOYMENT OUTLOOK: Advances in Zoology have an extremely important and useful bearing on progress in the fields of agriculture, horticulture, plant protection, forestry, fisheries (both inland and marine,) health (malaria and filaria control schemes.)

The study, management, development and conservation of "wild life" is fascinating in itself; and its practical application to economic problems offers the possibilities of combining study with remunerative employment.

FOR FURTHER INFORMATION on training facilities, job openings, etc., contacts may be made with:—

1. The Registrar of your University.
2. The Indian Council of Agricultural, Research New Delhi.
3. The Zoological Survey of India, Calcutta.
4. The Indian Agricultural Research Institute, New Delhi.
5. The Malaria Institute of India, Delhi.
6. The Central Inland Fisheries Research Station, Calcutta.
7. The State Directors of Agriculture, Fisheries/Public Health of your State.

8. The Forest Research Institute, Dehra Dun.

9. The Indian Veterinary Research Institute, Izatnagar.

10. The Directorate of Plant Protection, Quarantine and Storage New Delhi.

11. The Employment Exchange serving your area.

(Courtesy: 'Union Ministry of L. and E.')

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U.S. STUDENTS PUBLISH SCIENCE JOURNAL

A group of serious-minded college students at the University of California are engaged in a venture much discussed by their elders these days: to stimulate interest in science among American youth. In a garage near the University of California campus at Berkeley, they have set up headquarters for a student science journal called **Particle** whose aim is to promote research and thought in mathematics and the natural sciences among student subscribers throughout the United States.

The high standard of material published in **Particle** has won praise from well known scientists as well as financial help from various sources. Since the publication was started in the spring of 1958, its editors have produced five issues of from 35 to 50 pages. They now hope to issue it quarterly. In three years, subscriptions have risen from 200 to 600, but the journal reaches a far wider audience. Over 50 school libraries and many student science clubs subscribe.

The editors of **Particle** would be happy to make contact with anyone interested in their initiative. Letters should be addressed to **Particle**, 2531 Ridge Road, Berkeley 9, California, United States.

I still retain my thirst for knowledge my passion for holding converse with the greatest minds of all ages and nations; my power of forgetting what surrounds me, or living with the past, the future, and the unreal. Books are becoming everything to me. If I had at this moment my choice of life, I would bury myself in one of those libraries that we saw together at the universities, and would never pass a waking hour without a book before me.

—Macaulay

EDUCATIONAL FORUM

ROLE OF EDUCATION IN ECONOMIC AND SOCIAL DEVELOPMENT

Speaking on June 2 on the role of education in economic and social development during the discussion in Unesco Executive Board meeting in Paris, Shrimati Indira Gandhi referred to the new and universal importance attached to education in planning for development in India for the Third Five Year Plan.

She said that India was now determined to give its due place to education in national programmes for economic and social development. In order to give further stimulus to the work of Unesco in this field, Shrimati Indira Gandhi suggested that the Executive Board might formulate and adopt a declaration on the role of education in economic and social development for the guidance of member-States, Unesco's Secretariat and other international organisations concerned. Shrimati Gandhi's suggestion was later adopted by the Board.

Speaking earlier on June 1 in the course of discussion in the Executive Board on measures designed to promote among the youth ideals of peace, mutual respect and understanding between peoples, Shrimati Indira Gandhi referred to the importance and urgency of such programmes and suggested that Unesco should organise world wide consultation with international and national youth organisations for the formulation of effective and comprehensive measures. She referred to the ideals which inspired the Indian youth. The Executive Board authorised the Director General of Unesco to prepare a report after studying ways and means of intensifying international, national and voluntary action in this field including the possibility of formulating an international declaration, setting out basic principles concerning promotion among the youth of ideals of peace, mutual respect and understanding between peoples.

SCHOLARSHIPS FOR CHILDREN OF TEACHERS

The Government of India have decided to award 500 Post-Matric Merit Scholar-

ships every year to the children of Primary and Secondary School teachers in the country.

The first of these awards will be made during 1961 on the results of the school leaving examination (High School/Matriculation/Higher Secondary/Senior Cambridge, or other School leaving examination) held in March-April, 1961 and only those who have appeared in these examinations in 1961 will be eligible (except in the case of Senior Cambridge, for which the examination held in December, 1960 will be taken into account).

Only those candidates will be eligible to apply who have obtained at least 1st Class or where there is no Class or Division, at least 60 per cent marks in the aggregate in the School leaving examination.

SECOND COMMONWEALTH EDUCATION CONFERENCE

The Commonwealth Education Liaison Committee announced in London that, at the invitation of the Government of India, the Second Commonwealth Education Conference will open in Vigyan Bhawan, New Delhi, on Thursday, January 11, 1962 and conclude on Thursday, January 25, 1962 before Republic Day.

The purpose of the Conference will be to review progress in the activities sponsored by the Commonwealth Education Conference at Oxford and to make further plans in the light of the experience gained; and to consider in what other manner the arrangements for co-operation between the countries of the Commonwealth could be improved.

The first Commonwealth Education Conference was held at Oxford in July 1959 as a result of an initiative taken by Commonwealth Ministers at the Trade and Economic Conference held at Montreal in September, 1958. The Oxford Conference recommended that, to sustain the momentum of the new drive in co-operation which it believed it had initiated, another Commonwealth Education Conference should subsequently be convened to take stock of

the progress made in the intervening period and to make further plans for the future.

The Commonwealth Education Liaison Committee is the body established in accordance with the recommendations of the Oxford Conference to enable Governments to consider together the development of the schemes of educational assistance which the Conference had agreed upon. It comprises one representative of each Commonwealth Government together with one member representing the United Kingdom colonial territories and co-opted members under Sir Philip Morris (Vice-Chancellor of Bristol University) as independent chairman.

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PRODUCTION OF SCHOOL TEXT BOOKS

A number of recommendations have been made by the conference of State Education Secretaries and Directors of Public Instruction and Education held in New Delhi. The chief among these relate to the problem of production, supply and distribution of text books. The conference has recommended that each State should immediately undertake a detailed study of this problem. The Planning Commission assured the conference that money would be made available for any scheme that may be undertaken in this regard. The conference was of the view that science education should be given top priority in the education programmes in the Third Plan. The conference examined in detail the administrative and organizational measures to ensure the effective implementation of the programmes under the Third Plan. It also decided to implement two recent suggestions of the Prime Minister. One was that school children should use rucksacks for carrying books rather than handbags. The second was that Panchayati Raj and cooperative movement should figure more prominently in schools. For promoting knowledge in these subjects among students, a seven-point programme was adopted.

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TECHNICAL EDUCATION IN INDIA

Up to date information on institutions in India providing technical education facilities is contained in "Facilities for Technical Education in India", Published recently by the Union Ministry of Scientific Research and Cultural Affairs.

The first section of the publication classifies the technical institutions into those conducting diploma courses; first degree courses and others providing facilities for post-graduate studies and research. The second section gives a detailed account of each institution including the duration of the courses, commencement of the sessions, admission requirements, reservation of seats, fees charged, scholarships and other forms of assistance available, hostel facilities and other information.

Since Independence, there has been a very rapid expansion of technical education facilities in the country. In 1947 there were only 38 institutions for first degree courses with a total admission capacity of 2940 students. Institutions offering diploma courses numbered only 53 and admitted about 3670 students. In 1959-60, institutions offering degree courses totalled 87 and those offering diploma courses numbered 166. Admissions increased to over 11,270 students for degree courses and 20,660 students for diploma courses.

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NATIONAL COUNCIL FOR WOMEN'S EDUCATION

The Government of India have appointed Shrimati Raksha Saran, a prominent social worker of Delhi, as the Chairman of the National Council for Women's Education in place of Shrimati Durgabai Deshmukh who has since resigned.

The National Council was set up in 1959 to advise the Centre on matters pertaining to the education of girls at the school level and of adult women. The Council was to help in the formulation of policies, programmes, targets and priorities for the expansion and improvement of girls' education. The Council was also to assess the progress achieved from time to time and suggest measures for the evaluation of work done in this field.

Besides the Chairman, the Council consists of a nominee each of the State Governments, one member of the Central Advisory Board of Education, two members of Parliament, one representative each of the Planning Commission, the Ministries of Community Development and Cooperation, Health and Labour and of the Centrally-administered areas and two representatives of the Ministry of Education.

The tenure of office of the non-official members is two years.

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

FULL ASTRONOMICAL CLOCK

The first full astronomical clock to be produced in Britain for 250 years was recently on show at the Science Museum, South Kensington.

It is probably the most complex mechanical clock to be shown to the British public and is an exact reproduction of a clock first designed and constructed nearly 400 years ago by the Italian savant John Dondi, who was at various times Professor of Logic, Medicine and Astronomy.

During the years 1348 to 1364 he constructed the first clock to show, besides mean or clock time, the sidereal or star time and the motions of the sun, the moon and of the five then known planets, all driven from an ordinary weight-driven clock movement.

It was made of brass and involved most delicate and intricate gearing. This is all the more extraordinary since, as far as is known, the weight-driven mechanical clock was invented only about 50 years before and was then, and for some centuries after, still a clumsy, forged-iron affair.

Besides the motions described, the clock records the hour, the minute, the length of daylight for every day, the Saints' days, the day of the month and the times of the rising and setting of the sun.

There are also a dial to record the notion of the nodes, of which the hand makes one revolution in over 18 years, and a perpetual mechanical calendar for Easter, an achievement not paralleled for 500 years. Dondi's exact treatment of the noon's trajectory was not repeated for 400 years.

The clock remained in Italy until 1585 and then in Spain till 1809, when it was destroyed in the Peninsular wars. Fortunately Dondi left a full description, in Latin, of how he made the clock, with working drawings, and although this has been well known for centuries, no one examined it horologically till the late G. H. Baillie had it translated in the 1930's.

It has fallen to the horological author Mr. H. Alan Lloyd to complete Baillie's work, and, after publishing a full description in 1955, he decided to have a reconstruction of the clock made. He found enthusiastic collaborators in the managing director, Mr. Geoffrey Buggins, and his co-director and chief craftsman, Mr. Peter Haward, of Thwaites and Reed Ltd.

Their joint efforts have resulted in the production of a clock of astounding beauty and complexity, unique in the world today, truly a fitting tribute to the genius of its great Italian inventor. The clock had gone to the Smithsonian Institution in Washington after June 25, 1961.

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PULITZER PRIZE AWARDS

Yasushi Nagao of the Mainichi Newspapers, Tokyo, won the Pulitzer Prize award for news photography for his picture of the fatal stabbing of the Japanese Socialist leader, Mr. Inejuro Asonuma, by a young fanatic at a political rally last year, it was announced in New York on May 2, 1961.

This was the first Pulitzer award to a foreign photographer and the first to a Japanese in any category.

Harper Lee's novel "To Kill a Mockingbird," won the prize for fiction.

The drama award went to the play "All The Way Home," which was adapted by Tad Mosel from the late James Agee's novel "A Death in the Family."

Awards in arts and letters are worth \$500 (Rs. 2,500).

The Pulitzer gold medal for meritorious public service in journalism went to the Amariloo (Texas) "Globe Times" for its exposure of a breakdown in local law enforcement.

The award for international reporting went to Lynn Heinzerling of the Associated Press for his coverage of the early stages of the Congo crisis "under extraordinarily difficult conditions." His "keen ana-

lysis of events in other parts of Africa" was also mentioned.

Edward Cony of the "Wall Street Journal" won the award for national reporting for an analysis of timber dealings.

The journalism awards carry cash prizes of \$1,000 (Rs. 5,000) each.

FOREIGN TOURISTS IN INDIA

The statistics now available place the number of tourist arrivals in India (barring Pakistan nationals) during the year 1960 at 123,095, which is an all-time record. As compared with arrivals in 1959 (1,09,464) this registered an increase of 12.5 per cent.

The statistics reveal a strong and growing trend among the U.S. nationals to visit India.

Next in number were the tourists from the U.K. who constituted 15.2 per cent (18,745) of the total for 1960. Compared with 1959 arrivals from the U.K. were up by 11.1 per cent.

About 35,134 foreigners were granted visas for entry into India between January 1 and March 31, 1961.

Of this 19,386 were tourists, 4,023 business men and 1,891 students.

The principal nationalities were: Americans (15,331); Afghans (970); French (2,330); Germans (2,620); Indonesians (1,543); Italians (1,758); Iranians (720); Portuguese (446); Russians (872); Swiss (798) and Thais (893).

LENIN PEACE PRIZE FOR 1960

For outstanding services in the struggle for strengthening and preservation of peace the International Committee for Lenin Prizes conferred International Lenin Peace Prizes for 1960 to:

Fidel Castro Ruz, public leader and statesman of the Cuban Republic, whose entire life is dedicated to the noble cause of the struggle of the peoples for freedom and independence;

Sekou Toure, leader and statesman of Guinea, a founder and prominent leader of the Democratic Party of Guinea, regarded by the broad masses as an outstanding peace champion;

Mrs. Rameshwari Nehru, Indian public leader, who, since the twenties of this century, has been taking active part in the women's movement of India and passion-

ately defending the idea of universal disarmament;

Mikhail Sadoveanu, Rumanian writer and public leader, whose literary works constitute a worthy contribution to the peace movement and who himself is an active peace champion;

Antoine Georges Tabet, Lebanese architect and public leader, a tireless fighter against foreign interference in the internal affairs of Arab countries;

Ostap Dlusski, Polish public leader, outstanding international fighter for the triumph of the ideas of socialism, one of the initiators of the world peace movement;

William Morrow, Australian public leader, whose whole life has been dedicated to the Australian labour movement, a founder of the Labour Party of Australia, prominent trade union leader, enthusiastic supporter of universal and complete disarmament proposals.

The International Lenin Prizes Committee met on April 6 and 7 with Academican Dmitry Skobeltsyn in the chair. The decision awarding the prizes was signed by Skobeltsyn, the Vice-Chairman of the Committee Kuo Mo-jo and Louis Aragon, and Committee members: Grigory Alexandrov, John Bernal, Jan Dembowski, Anna Seghers, Pablo Neruda, Sahib Singh Sokhey, Ilya Ehrenburg.

85-MPH BOWLING

How fast is a bowler?

The "Daily Mail" has come up with the answer after a series of photographic and timing tests on three famous cricketers in action.

The trio are West Indies' Wesely Hall, reputed to be the fastest Test bowler in the world; England's Freddy Trueman; and, Australia's Alan Davidson.

One result was that Hall was not quite as quick as Trueman off the pitch but a fraction faster through the air.

Trueman attained a maximum speed through the air of 84.6 mph and 73.5 mph off the pitch.

Hall reached 85.2 mph in flight and 71.4 mph off the ground.

The left-handed Davidson was about 11 mph. slower than Trueman and Hall through the air, but proved he is able to pitch the ball on a spot more accurately.

Hall's length was less consistent, but he hit a single stump five times out of six and once sent it flying over the practice net.

* * *

ANTARCTIC TREATY COMES INTO FORCE

The Antarctic Treaty signed by 12 nations which demilitarizes the Antarctic continent and sets it aside for peaceful research, took effect on June 23, 1961.

The Treaty became effective when ratifying documents signed by Argentina, Chile and Australia were formally and simultaneously handed in.

This completed the process of official ratification by the 12 participating powers.

The Treaty was signed on December 1, 1959 in Washington by the U.S.A., the Soviet Union, Australia, Argentina, Belgium, Britain, Chile, France, Japan, New Zealand, Norway and South Africa.

The Treaty "freezes" the territorial claims in the Antarctica of seven of the signatories, Argentina, Australia, Britain, Chile, France, New Zealand and Norway.

It rules out any new territorial claims. It prohibits the setting up of any military bases in the Antarctic and any other measures of a military nature on that continent, and it also forbids any nuclear explosions there.

* * *

ASIAN PRODUCTIVITY ORGANIZATION

Asian countries have formally completed the inauguration of an organisation designed to help them raise their standards of living.

Delegates from eight countries, including India issued a communique in Tokyo on May 26, 1961, announcing the formation of the Asian Productivity Organisation (A.P.O.).

The communique said: "This newly-established organisation will provide a vehicle for co-operative action among its members and serve as a mechanism for the fullest exchange of experience and know-how as well as function as a channel through which outside assistance can be directed to its members collectively."

The Governing Body elected Dr. Jose C. Locsin, Chairman of the National Economic Council of the Philippines, as Chairman.

Dr. P. S. Lokanathan, Chairman of the National Productivity Council of India, and

Dr. Ichiro Nakayama, Vice-President of the Japan Productivity Centre were elected Vice-Chairmen.

It was also decided that the A.P.O. headquarters would be situated in Tokyo for the first two years.

The next session of the Governing Body will be held in mid-November in Tokyo to consider the programme and budget for 1962.

Mr. Oshikawa (Japan) in a statement issued on May 26, 1961, said the A.P.O. was the first international organisation ever formed by Asian countries on their own.

Member countries are Formosa, India, Japan, South Korea, Nepal, Pakistan, the Philippines and Thailand.

Observers from Laos, Malaya, the U.S.A., South Viet Nam and the United Nations Economic Commission for Asia and the Far East were present at the five days of talks in Tokyo.

The communique said the Governing Body had approved a programme in which experts would travel in various Asian countries to give instructions in management training, marketing and productivity technique.

The United States Government had offered financial assistance, it added.

Mr. Oshikawa said annual contributions from member-nations would total \$108,000. India would contribute \$38,000, and Japan \$36,000.

* * *

LONGEST EVER SPEECH

The longest speech on record is believed to have been that made by Mr. De Cosmos, in the Legislature of British Columbia, when a measure was pending, the passage of which would take from a great many settlers their lands.

De Cosmos was in a hopeless minority. The job had been held back till the eve of the close of the session: unless legislation was taken before noon of a given day, the act of confiscation would fail.

The day before the expiration of the limitation, De Cosmos got the floor, about 10 a.m. and began a speech against the Bill. Its friends cared little, for they supposed that by one or two o'clock he would be through, and the Bill could be put on its passage. . . .

One o'clock came and De Cosmos was

speaking still—had not more than entered upon his subject. Two o'clock—he was saying, "In the second place."

Three o'clock—he produced a fearful bundle of evidence, and insisted on reading it. The majority began to have a suspicion of the truth—he was going to speak till next noon and kill the Bill!

For a while they made merry over it, but, as it came on dusk, they began to get alarmed. They tried interruptions, but soon abandoned them, because each one afforded him a chance to discuss and gain time. They tried to shout him down, but that gave him a breathing space, and finally, they settled down to watch the combat between strength of will and weakness of body. They gave him no mercy, no adjournment for dinner, no chance to do more than wet his lips with water, no wandering from his subject, no sitting down.

Twilight darkened; the gas was lit, members slipped out to dinner in relays and returned to sleep in squads; but Dr. Cosmos went on. The Speaker, to whom he was addressing himself, was alternately dozing and trying to look wide awake.

Day dawned, and the majority slipped out in squads to wash and breakfast, and the speaker still held on. It cannot be said that it was a very logical, eloquent or sustained speech. There were digressions in it, repetitions also. But still the speaker kept on; and at last, noon came to a baffled majority, livid with rage.

And a single man was triumphant, though his voice had sunk to a husky whisper, his eyes were almost shut, and were bleared and blood-shot, his legs tottered under him; his baked lips were cracked and smeared with blood.

De Cosmos had spoken twenty-six hours, and saved the settlers their lands.

* * *

CALENDAR TRICKS AT SEA

When you go globe-trotting, strange things in regard to time may happen. Did you ever hear of Meridian Day? I hadn't until a year or so ago, when I was returning from Japan. Like Easter, it's movable; and it can occur at any time in the year.

In 1955, while we were on a world trip, via Australia, somewhere in the Pacific we lost a day which I never expected to pick up again. Then, two years later on a journey by way of South America,

South Africa and the Orient, by travelling in the opposite direction, that day was restored, and I found, to my surprise, that such a date is Meridian Day.

As you know, the international date line is an imaginary one, passing through the Pacific in a general northerly and southerly direction. It separates the Pacific islands in such a way that all east of the line have the same date as the Americas, while those to the west have dates similar to those of Japan and Australia.

Between Yokohama and San Francisco, for instance, you pass from the situation where you are 12 hours ahead of Greenwich, to one where you are 12 hours behind it. Thus the calendar is retarded. You go backward 24 hours and gain a day—Meridian Day. On the President Hoover this date came between June 14 and 15.

Losing a day may create a strange and most unusual situation. Our purser told us of a "freak of navigation" that happened at the turn of the last century.

The Warrimoo, he said, on the evening of Dec. 30, 1899, was en route from Vancouver, Canada, to Australia. When the navigator reported to the captain that they were just a few miles from the spot where the equator and international date line meet, Captain Phillips realised the unusual possibilities.

So, every few minutes he checked his position, changed his course some what, and adjusted speed to reach this point at the right time.

Exactly at midnight, the purser added, the Warrimoo reached the intersection, with these startling results. The forward part of the ship was in the Southern Hemisphere—the stern in the Northern; the date in the latter was Dec. 30, 1899, in the bow, Jan. 1, 1900.

Therefore, the vessel was "not only in two different days, two different months, two different seasons, but also two centuries—all at the same time."

Because of this unusual happening, it was pointed out, the passengers on the Warrimoo missed their New Year's Eve celebration, and the entire day of Dec. 31, 1899. However, there was one compensation: no doubt, these travellers were the first people in the world to greet the twentieth century.

('M. R. Krythe')

Readers' VIEWS

ON CHILD MARRIAGE

Sir,

We have the Child Marriage Restraint Act. This Act, which came into force on April 1, 1930, is now in force throughout India. It restrains the marriages of children, though the marriage itself is not declared void. It lays down that no marriage to which a child i.e. a male under 18 years of age, or a female under 15 years of age, is a party, may be solemnized. And any person performing, conducting or directing any child marriage is punishable with imprisonment of 3 months and fine. But is not this Act just a dead letter?

Many child-marriages have been and are performed throughout India in total contravention of the Act. What is more peculiar is that in 99 per cent of such cases, the law keeps just silent.

Another thing to take note of is why provisions of the Act are violated. Because the Act is meaningless? Or because people are unaware of the fact that there exists such Act too?

The fact is that neither the Act is meaningless, nor are people interested in violating its provisions. The reasons, why its provisions are violated, are that most of the people are unable to grasp its aims, and many of them are not even aware if the Act at all exists.

As a matter of fact wide publicity has not been given to the Act. Its aims have not been explained comprehensively to the public at large. Neither it has reached to all the people nor care has been taken to ensure that it is worked up to and not violated. Moreover, sufficient measures have not been taken to cultivate and mould public opinion. Keeping in view that social laws lack effectiveness unless they are backed by public opinion and co-operation, it is desired that necessary steps may be taken in this respect.

A word to the parents also. The obligations to children arise out of their dependence. Children should be given all chances with a view to making them the men and women they were meant to be. Every child must be helped to grow up

into a healthy, responsible and self-reliant citizen.

Child-marriage is a great hindrance to the overall development of the child's personality. It has eaten and is eating into the very vitals of our social structure. To quote Mahatma Gandhi, "it is a moral as well as a physical evil. For it not only undermines our morals but also induces physical degeneration." And hence, it should be avoided.

(Rajendra Prasad Goswami, New Delhi)

GANDHIJI'S PHILOSOPHY OF TRUTH

Sir,

The conception of truth is not easy to gauge. A rational discrimination of our good and bad thoughts and actions may, of course, enable us to reveal the truth. Truth without lie has no independent existence; for every truth is extracted out of a mass of right and wrongs. In other words, it is the lie that ultimately leads us to reach the truth. But truth in Gandhian conception was an extreme phase of realising the lofty ideals devoted to even illusive consequences. Gandhiji attached great importance to good means aiming at achieving a certain end. This is why his truth was a positive one. More clearly we can say that he unlike many a thinker did not advocate the theory of good supported by unfair means. To him truth was non-violence, morality and self-reliance.

So Gandhiji's philosophy of truth was an absolute synthesis of one's violent, unmoral thoughts and actions. Even to Quiet a weeping baby by falsely saying that there comes his mother, is a lie in Gandhian philosophy of truth. He held extreme views which have been subjected to scathing criticism even by his contemporary thinkers. They contend that Gandhiji evolved his philosophy of truth on mere fallacy that is far impossible to realize and he gave a weapon of non-violence to protect the truth. This criticism on his philosophy of truth can not be entirely justified.

However, his extreme synthesis of truth and lie cannot be accepted, as truth is essen-

tially a discriminate realization of our illusions and disillusion. While establishing some truth we have to analyse the mass of lies. So truth is a stage acquired when lie ceases to operate and lie begins when the truth operates in disguise. The synthesis of lie and the disguised truth may be the truth in the real sense.

(Amrit Chadha, Simla)

* * *

CIVIL-WAR REVEALS COLD-WAR

Sir,

Having visualized the incident of Angola none will deny that Angolese have been fettered by inequality and injustice, poverty and cruel jurisdiction. The land of Angola is being besmeared with blood of innocent people. The reason why the Angolese are being killed cruelly by the military troops of Salazar is that there is scarcely any individual in Angola who remains unmoved by the spirit of nationalism and does think of remaining under Salazar's administration—the administration which is full of unscrupulous rules, based rather on the impulse to seize what the people possess than on the desire to create an atmosphere in which public can have pleasure.

Not less noticeable is the matter that Salazar wants to extinguish the burning lamp of nationalism. To Salazar, public opinion is meaningless and law is nothing but the manifestation of what he vehemently declares. Undoubtedly true that Salazar has known from the elections of 1958 in which 60 per cent of Angolese had cast their votes in favour of Delgado—the opponent of Salazar—that the people have no faith in him. And that is perhaps why Salazar does not like to see the nationalist movement. But why Angolese are likely to have pleasure from another form of Government but not from Salazar Government is no more to be asked or answered than why Salazar gets pleasure from autocracy but not from democracy.

Nay that law of the autocratic State is not what the ruler utters. But that law derives its sanction from determinate human superior and its actual content is based on the will and opinion of the individual no one can dare deny.

Hitler was an autocrat but had public opinion been so neglected by him or the land of so-called Germany been polluted by blood of innocent people, Hitlerism would not have existed for a long time.

Therefore as to the question whether Salazar will be capable of singing an everlasting song of autocracy after taking his refuge on the leafy bower of Angola, the answer would be in the negative.

In order, therefore, to exonerate Angola from cruelty of Salazarism, two ways can be indicated. Firstly, the NATO power should not interfere with the civil war of Angola. Kennedy has said that communism may spread in that country in which poetry and inequality prevail. Therefore if NATO is to guard against communism it should not help Salazar who is making the life of the people bitter and painful. Secondly, U.N.O. ought to look after the condition of Angola with its neutral vigilance. The first and foremost duty of U.N.O. is to support a legal parliament in Angola in which there is a definite place for people. If U.N.O. be unconscious of Angola's civil-war, then Angola's situation will be like that of Laos, Congo, Cuba and Algeria which have become the proper places of cold-war.

(Prabhat Kumar Santra, Midnapore)

* * *

MILITARY DICTATORSHIP

Sir,

The twentieth century will be a landmark in the history of mankind. It has witnessed many a country ruled by military dictators. It may in one sense mean the submission of man's will to the forces of physical strength. When some people of India casually talk about military dictatorship as the best panacea for the eradication of the existing evils in the country, they really mean the preservation of national solidarity by destructing all disruptive forces.

Except Burma (where the pact between the Premier and the Commander-in-Chief was executed honourably for a short period), the rise of military dictatorship in other countries has not brought the desired results. Supplemented as it is, from the rule of law by the personal directives of the dictator, the innate nature of man is made inactive by the forcible curtailment of individual freedom. The zeal of the dictator is appreciated by the mass to the extent he goes to suppress the existing evils. But when the dictator undertakes measures of alleged improvements within the country and also faces rivalries from other nations on national matters, he has to do certain things which are not liked by

the same entire mass of people who liked his internal action of suppressing the past evils and no country will obviously give the dictator to have his predominance over her at the cost of her own disadvantage. In fact, history has given ample evidence of this. The rise of dictator's power in Germany was a matter of common resistance for the major countries of the world. The regime of Salazar is in a state of mass upsurge.

In the face of all these, it will be misconstrued to think that military dictatorship will cure all our evils. There can be no gainsaying the fact that notwithstanding the evils that persist in our infant democracy, the aims and objects to which we have been pursuing are ideal ones. Since leadership under Nehruji is not much disputed, we as common men have to play our part instead of looking up for the water to fall into our thirsty mouths. A conscience mass is at the helm of its own destiny. It has the will to make and unmake persons for being ruled in the best interests of the society. Surrendering to a dictator implies our incapacity. And when the term of surrender comes are we to go back to the eighteenth century argument of Hobbes and Lock and say pathetically, "who ultimately retained the power?" Let us be wise and practical.

(Radha Benode Mukherjee, Bhadrak)

INEVITABILITY OF WAR

Sir,

Your Editorial in the June 1961 issue on 'INEVITABILITY OF WAR' was quite interesting and thought-provoking. But the views expressed cannot be accepted by certain people. It is said, contrary to your view, that launching of nuclear weapons in different bigger states had actually strengthened peace. It may look like a paradox. But to a certain extent, it is a fact, because it is the balance of terror that has actually preserved the peace. Everyone is aware of the fact that the victory of another global war would be so universal that there would be neither vanquished nor victor. It would result in total annihilation of human civilisation itself.

(A. Vijayaraghvan, Madras)

CORRIGENDUM

Sir,

In the Columns 'General Knowledge Test' of your July 1961 issue I have found two mis-

takes: In question No. 4 (b) (iii) of paper II, the formula for 'soda-ash' is given as KCO_3 . But I think it should be $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$. In the solution of question No. 8 (a) of the same paper, you have taken $u=16$, whereas we should take $u=-16$. Doing so the answer becomes 6 seconds and not 5, as calculated by you. Kindly confirm.

(Gautam K. Ghosh, Calcutta;

Ashish Chakravarty, Varanasi)

(Yes, you are right. We regret the mistake.

—Ed. C & C.)

FORTHCOMING EXAMINATION

National Defence Academy Examination, December, 1961

The Union Public Service Commission will hold a combined Army, Navy and Air Force Examination at Allahabad, Bangalore, Bhopal, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Jammu, Madras, Nagpur, Patiala, Patna, Shillong and Trivandrum on the 27th and 28th December, 1961, for selection of candidates for admission to the National Defence Academy.

Age Limits: Candidates must have been born not earlier than 2nd January, 1945, and not later than 1st July, 1947. These age limits can in no case be relaxed.

Qualifications: Matriculation or equivalent. Applications from candidates who have appeared or intend to appear at Matriculation or equivalent examination acceptable provisionally. Application forms and full particulars obtainable from Secretary, Union Public Service Commission, Dholpur House, D.H.Q. P.O., New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. A candidate must clearly state on money order coupon "National Defence Academy Examination, December, 1961" and also give his name and full postal address in block letters. Postal orders or cheques or currency notes will not be accepted in lieu of money orders. Application forms and connected papers are also obtainable free from the nearest Recruiting Officer/Military Sub-Area Headquarters or the National Cadet Corps Unit. Only unmarried male candidates can apply for admission to this Examination. Completed applications must reach the Union Public Service Commission by 28th August, 1961 (11th September, 1961 for candidates abroad).

FILM WORLD

PRESIDENT'S APPEAL TO FILM PRODUCERS

Speaking at a function in Bombay, the President, Dr. Rajendra Prasad, called upon the Film Industry to realise that Commercial success was good and enduring only when it was tempered by consideration of people's weal and its pace was determined by the ultimate good of the society. He said the cinema, like the press and the Radio, was a medium of great potentiality to influence people's thought and action, and hence strenuous efforts had to be made by the industry to improve the quality of recreation by providing right kind of films. He appealed to film producers that they should always bear in mind the age-old traditions and the high place India's history and culture had given to morals and do nothing which would in the least swerve from the path of rectitude even in the interest of so-called art and much less for winning cheap popularity and commanding large audiences at the cost of higher values. It was this emphasis on moral ideals and the right social conduct, Dr. Rajendra Prasad said, which imposed an inescapable obligation on Government. The State censorship of films became a duty in the interest of the people. The President said that there was no reason to believe that censorship would operate to the detriment of the film industry.

PROVIDENT FUND BENEFITS FOR FILM INDUSTRY

The Government of India have decided to extend the benefit of compulsory contributory provident fund under the Employees' Provident Funds Act to cinema including preview theatres, film studios, film production concerns, distribution concerns dealing with exposed films and film processing laboratories. This will take effect from July 31, 1961. The benefit is applicable to establishments which employ twenty or more persons.

"BLASPHEMOUS" FILMS

The Vatican newspaper, "Osservatore Romano," has criticised the recent Cannes Film Festival for awarding prizes to two

"blasphemous" films—"Mother Jeanne of the Angles," (Polish) and "Viridiana" ((Spanish).

The Director of the daily wrote that "a little impious feast of blasphemous representations in the work of the two films has been added to the usual ambiguous exhibitions of sex."

"DO ANKHEN" BAGS ANOTHER AWARD

Rajkamal's "Do Ankhon Barah Haath" has bagged one more award in U.S.A.

The Southern California Motion Picture Council is reported to have declared this film as the 'Best Picture of the Month of May.'

Encomiums for the toy seller portrayed in the film by Sandhya read as follows:

"She has real beauty, grave and piquant charm, that adds a delightful touch of humour with a basket of toys on her head as she crosses the desert to sell toys and sweets to children, playing her native violin with the little drum trailing behind while she sings the haunting Toy Seller's song."

FILM CLUBS FOR DELHI CHILDREN

The children in the Capital will soon be able to see films nearer home.

About 50 children's film clubs are to be shortly opened in the various parts of Delhi under a pilot project to popularise children's films. Twenty clubs have already been formed. If successful, the project will be extended to other cities.

Each club will cover about 1,000 families or more, according to the population of the area. The films will be screened in open parks and each family will be charged 50 nP. for admission to each show.

A fixed percentage of the collections will go to the respective clubs, to be used for welfare activities.

FILM PRODUCTION DURING 1960

A report on the film industry has revealed that the production of feature films touched a new high in 1960 when 315 films were made as against 306 in 1959. Hindi films accounted for the largest number (115), followed by Tamil (82), Telugu (54),

Bengali (36), Marathi (15), Kannada (12), Malayalam (6), Oriya (5), Punjabi (4), Urdu (3), Gujarati (2) and Sindhi (1).

A total of 166 feature films were based on social themes, 30 each on mythological subjects, legends and crimes, 26 on fantasies, 12 on adventures, 10 on historicals, and 3 each on biographies, stunts and devotional. Three films treated themes considered suitable for children.

* * *

FILM FESTIVAL IN INDIA

The International Federation of Film Producers' Associations has recognised the International Film Festival of India to be held this year.

Disclosing this at the first meeting of the central festival committee held in New Delhi, Dr. B. V. Keskar, Union Minister for Information and Broadcasting, said that the recognition by the Federation had added to the status of the festival of India. On the basis of this year's experience, the Minister added, the Government would consider fixing periodicity for festivals in future. This year's festival, he explained, was not of a competitive nature but, in recognition of participation in it, souvenirs would be presented.

Dr. Keskar said that several national film producers' organisations were affiliated to the International Federation of Film Producers' Associations. In consonance with the Federation's rules, which did not permit the holding of a festival at a number of places, it had been decided to term the presentation of films in New Delhi as the "International Film Festival of India."

The committee accepted the suggestion regarding the dates of the festival and film weeks in Delhi, Calcutta, Madras and Bombay. The festival would be held in Delhi from October 27 to November 2, while presentation of films would take place in Calcutta from November 1 to 7, in Madras from November 6 to 11 and in Bombay from November 11 to 17.

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CENSORSHIP AND CRISIS IN FILM INDUSTRY

Dr. B. V. Keskar, Union Minister of Information and Broadcasting, has said that any "misleading effort" to mix the question of film censorship and the financial crisis in the film industry could only make

smooth working arrangement of censorship difficult, if not impossible.

In a Press statement in New Delhi, Dr. Keskar said: "I am having the matter of censorship examined, but no solution will be possible if the yardstick to be applied is the easing of the financial crisis, because that crisis is likely to continue indefinitely until the financial conventions in the industry are regularised and put on a sound stable footing."

Dr. Keskar regretted what he described as "propaganda" by film interests that the crisis in the industry was due to censorship.

Dr. Keskar said: "During the recent talks that I had with some representatives of film interests from Bombay, I had clarified that the prevailing financial crisis in the film industry should not be confounded with the question of complaints about censorship. I, however, find from correspondence that I am receiving from film interests and also from press statements and observations that a persistent propaganda is being made that the crisis in the industry is due to censorship."

"I regret this kind of propaganda. The financial crisis in the film industry has its own reasons which have been accumulating for quite some time and which is due to the want of suitable financial structure or regulation of the industry. Warnings about this had been given before also to the industry and it is time that the industry sets its house in order if it does not want the crisis to deepen. The crisis has no real connection with any change in censorship."

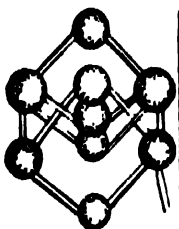
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NO TAX ON FILMS FOR CHILDREN

The Punjab Government has exempted the showing of children's films from entertainment tax and show tax as also relaxed restrictions regarding the opening and closing hours of cinema houses.

With a view to encouraging the production of films in the State the Government has set up its own film production unit and has set apart a sum of Rs. 5 lakhs for the purpose.

The Punjab Children's Film Society, which met in Simla on June 23, has decided to start three more mobile cinema units for screening children's films in rural areas. At present there is only one mobile unit, which gave 520 shows last year.



SCIENCE

& INVENTION

ELECTRONIC "FISH" FOR OCEANOGRAPHIC RESEARCH

An electronic "fish" designed and made by a Scottish firm is to be used by Italian scientists to plot the magnetic contours of the Mediterranean Sea.

The equipment is so sensitive that while it was under test at the electronics department of the Scottish firm—which is near a golf club—it was found that the metal on the golf clubs was upsetting the magnetic field and affecting the measurements made by the "fish".

By measuring the magnetic field in the sea, the contours can be plotted in the same way as geographical contours and provide information of interest to geophysicists and oceanographers.

The equipment is called a Proton Spin Magnetometer. Two "fish" housing electronic circuits, towed 1,000 ft. astern of a ship, send back signals, the frequencies of which are directly proportional to the earth's magnetic field. These frequencies are accurately measured and taped by equipment on board the ship.

* * *

NEW HYPOTHESIS ON ORIGIN OF SILVER CLOUDS

A novel view on the origin of the silver clouds—an interesting phenomenon on the threshold of space—has been given by the Estonian scientist Charles Villmann, who is in charge of one of the Soviet centres for the study of these clouds.

Villmann believes that the reason behind the appearance of silver clouds, which sometimes cover an area of several million square kilometres, are magneto-hydrodynamic phenomena in the highest layers of the atmosphere. This adds to the condensation hypothesis which is finding increasing recognition and which regards silver clouds as amalgamations of ice crystals, but does not explain all the factors of the emergence of conditions favouring the condensation of water vapour at the altitude of 80 to 100 kilometres.

In Villmann's opinion, the condensation processes in the birth of silver clouds

are stimulated by changes in the geomagnetic field. These changes are caused by the activity of the sun, which throws back clouds of plasma—what are called plasma bombs.

Particles of silver clouds, judging by Villmann's observations, reach 300 microns in diameter. These observations were made with the help of special equipment developed by the scientist himself.

Speaking at a conference of Soviet specialists on silver clouds, held in Tallinn, Villmann said that studies which would provide new information about silver clouds would be made by Soviet scientists in the international calm sun year (1964-1965).

* * *

NEW PICTURE OF ATOM'S CORE

A new picture of the atomic nucleus has emerged out of seven years of atom-smashing experimentation at Stanford University. A team of scientists, led by Dr. Robert Hofstadter, and including Dr. Conrad de Vries of the Netherlands, uncovered evidence supporting the theory of quantum electrodynamics, which hitherto has been unable to reconcile the similarities of protons and neutrons with their differences in electrical charge. Dr. Hofstadter said the two subatomic particles are exactly the same except for the way they spin. They consist of three layers of mesons (sometimes called the glue holding the nucleus together). The inner layer is actually a dense core, while the outer two are spinning clouds. All the layers are positively charged, except the neutron's middle layer which spins in such a way that it carries a negative charge.

The neutron's negative and positive charges cancel each other out, while the proton remains positive. "If our results are correct," Dr. Hofstadter said, "the structure of the proton and neutron is much simpler than we expected."

* * *

REJUVENATION IN SPACE

A Soviet scientist said in Moscow on April 14 that the state of

weightlessness affecting travellers in space would keep their bodies from ageing during a space flight.

Dr. Boris Klossovsky, writing in the Soviet "Economic Journal," said that "time goes by much more slowly in cosmic space than on the earth."

"The state of weightlessness alleviates functional tension of the cells of our body thus protecting them from ageing," he said.

"Soon," Dr. Klossovsky said, "we shall no longer be surprised to see patients from space-sanatoriums return to earth, not only cured of their ailment but also rejuvenated."

* * *

NEW U.S. EARTH SATELLITES

The successful orbiting of the United States' "Transit" satellite presages the time when ships at sea will be able to navigate in all kinds of weather on information provided by the earth-circling objects.

"Transit" is the main satellite of a group of three which rode a powerful Thor-Able-Star rocket into earth orbit from Cape Canaveral, Florida.

The other satellites are "Greb," a drum-shaped affair weighing 55 pounds (24.75 kilograms) which will gather data on the effects of sunspot activity on earth's radio communications, and "Injun," a 40-pound (18.14 kilogram) sphere to study the aurora, or the so-called northern lights.

Prior to launch, the device was given exhaustive "torture" tests. It failed to explode or rupture when burnt in nitric acid and in heat 5,000 degrees Fahrenheit. It remained intact in explosions of 1,100 pounds (495 kilograms) of dynamite and withstood being fired at high speed at granite block. The model now circling the earth is for experimental purposes.

For an operational system, four "Transit" satellites will have to be revolving around the earth. The system, when it materializes, will provide navigational data to ships at seas.

Each Transit satellite will carry electronic apparatus including a new "memory" unit to store data from ground stations. A ship, contacting the satellite electronically, will be fed information which can automatically be translated into the vessel's longitude and latitude.

The U.S. navy, which is conducting the programme to develop all-weather navigational satellites, is trying to reduce the weight of each satellite to about 90 pounds (40.5 kilograms).

The main satellite, "Transit", now in orbit weighs 175 pounds (79.75 kilograms)—which is about twice as light as earlier versions. The satellite's atomic generator is considered most favourably as a power source. Previous U.S. satellites used chemical batteries or solar cells for power. The new device, the first to be flown in any American satellite, uses as fuel radiation from a tiny piece of Plutonium 238, which is sufficient to last for several years.

* * *

'DUST' RING AROUND EARTH

American scientists have discovered a "smog" enveloping the earth at a height of about 200 kilometers. It is not very thick but ever-present and consists mostly of tiny bits of sulphur dust.

Physicists Christian E. Junge, Charles W. Chagnon and James E. Manson of the Air Force Cambridge Research Laboratories (Bedford, Mass.) report the finding in the April 12 issue of the **Journal Science**.

The stratospheric smog was detected by special instruments carried aloft by high-altitude balloons and high-flying research aircraft during 1960 as part of the Air Force's continuing programme of stratospheric weather investigations. The instruments were designed to obtain data on air circulation in the stratosphere. The flights were conducted as far north as the Canadian border and as far south as Argentina. All yielded evidence of the smog, called an "aerosol layer."

"This world-wide aerosol layer," the scientists said, "is most likely the one which may explain the purple light," a disk of red light appearing above the point of sunset and sunrise. The phenomenon has been observed regularly for more than one hundred years but to date has been unexplained.

The size and shape of the microscopic particles, the scientists said, indicate that they are not of meteoric origin. The finding thus tends to discredit the "meteor dust theory" which holds that meteor showers sprayed earthward act as cloud seeders to cause rainfall. Under the theory, heavy meteor particles fall through the stratos-

phere to the clouds in the troposphere below and cause precipitation.

The scientists said the very small particles in the lower region of the smog originate in the troposphere and are drawn by mixing.

The middle region of the smog contains medium-sized particles and the upper region holds relatively large, heavy particles. However, they said that the large particles are too few in number to account for any cloud-seeding effect below.

The particles in the three regions range in size from 1/10,000th of a millimeter to 2,200th of a millimeter.

"Thus far," the scientists said, "our data have provided no support for the theory that rainfall is stimulated on a world-wide basis by the influx of extraterrestrial dust through the stratosphere into the troposphere. The particles of the stratospheric aerosol layer do not have the characteristics required by this theory."

In addition, they said the very presence of the smog will make it very difficult to detect micrometeorite dust at the smog height. They estimated that there are 1,000 sulphur bits in the region for each bit of cosmic dust.

RADIO TRANSMITTER POWERED BY HUMAN VOICE

A radio transmitter that is powered entirely by the human voice has been patented by an American electronics engineer.

George W. Bryan Jr., the inventor, says that the transistorized device changes the physical energy of the voice's sound waves into electrical energy of sufficient strength to broadcast the speaker's words. Experimental models have transmitted for distances up to 100 yards (30 meters), and with further refinement it is expected that the range will be increased to one to two miles (1.6 to 3.2 kilometers).

ELECTRIC POWER FROM THE OCEAN

An American scientist has developed a device that can generate electric power from sea water and the sediments of the ocean bottom.

The device, made by Dr. Frederick D. Sisler of the U.S. Geological Survey, is an "organic" fuel cell that produces electri-

city directly from decomposing organic matter. The electricity is generated by making bacteria "burn" the organic matter.

Dr. Sisler's fuel cell is divided into two compartments. One contains sea water, organisms and bacteria; the other sea water and oxygen. An electrode is placed in each compartment, and the resulting energy, created by the "burning" organisms, is converted into electrical energy.

RADIO SIGNALS FROM A STAR

The first known individual star that sends out radio signals has been found and precisely located by astronomers at the California Institute of Technology's Radio Observatory in Owens Valley, California. Previous radio signals that have been detected have come more from areas of the sky rather than from individual stars.

The radio star, called by astronomers 3C-48, sends out radio signals that are 10,000,000 times stronger than those emitted by the sun, it is believed. The star is of 16th magnitude, and can therefore be seen only with a large telescope. It is located in the constellation Triangulum, which is close in the sky to the great spiral nebula in the constellation Andromeda.

8,000-WATT BULB DEVELOPED

An 8,000-watt light bulb, believed to be the most powerful in the world, has been developed by the Duro-Test Corporation in the United States.

The bulb is filled with xenon, a heavy colourless gas that is one of the so-called inert gases. The manufacturer says that the bulb can project its light for more than 50 miles (80 kilometers).

Love is the magician, the enchanter, that changes worthless things to joy, and makes right-royal kings and queens of common clay. It is the perfume of that wondrous flower, the heart, and without that sacred passion, that divine swoon, we are less than beasts; but with it, earth is heaven and we are gods. —R. G. Ingersoll

There is no good in arguing with the inevitable. The only argument available with an east wind is to put on your overcoat. —J.R. Lowell



DR. K. S. KRISHNAN

Dr. K. S. Krishnan, well-known scientist and Director of the National Physical Laboratory, died of a heart attack in New Delhi on June 14, 1961.

Kariamanikkam Srinivasa Krishnan was born in the village of Watrap near Srivilliputtur in the Ramnad district of Madras on Dec. 4, 1898. His father was a scholar of the old school deeply versed in Tamil and Sanskrit literature, which taste the son inherited to the full.

After early schooling in Watrap and Srivilliputtur, he studied in the American College at Madura and later in Christian College at Madras. After graduating in Physics from the Christian College he was for a few years a demonstrator in the same college.

Later Krishnan went to study physics under Prof. C. V. Raman at the Calcutta University and absorbed from the distinguished teacher an abiding interest in optics and molecular physics. Though Krishnan did not take his M.Sc. examination, Prof. Raman accepted him as a research student in 1923. In 1928 Krishnan joined Dacca University as reader. He did research in Dacca University till 1933 and published a number of scientific papers. When Prof. Raman left Calcutta in 1933, Krishnan was invited to take up the post of Mahendralal Sircar, professor of physics in the Indian Association for the Cultivation of Science.

Prof. Krishnan's contribution to physics was recognized by the invitations he received from Lord Rutherford in Cambridge and Sir William Bragg in London to give a course of lectures in the Cavendish Laboratory and in the Royal Institution in 1937. He later visited a number of universities in Europe and was awarded the university medal by the university of Liege. Krishnan was elected to the fellowship of the Royal Society in 1940. He was offered the post of professor of physics in the University of Allahabad in 1942. The professorship in Allahabad gave him the chance to review in a comprehensive and systematic way problems of classical scattering of

light, X-rays and electrons and of statistical thermodynamics.

In recognition of his great work in the scientific field he was knighted by the British Government in 1946.

Apart from his interest in science, Dr. Krishnan was a great scholar in Tamil, Sanskrit and Hindu religious lore. In spite of his heavy duties, Dr. Krishnan used to find time to take part in religious functions and discourses. He was the founder-president of the Delhi Bhajana Samaj. He had also love for music and bridge.

The greatest recognition given to scientific erudition in the country went to him in August 1958 when he was nominated a National Professor, which post, apart from conferring on him monetary benefits, provided him the facilities for continuing his greatest passion in life, research. Four years earlier, appreciation of his scientific achievements had been symbolized in the award of Padma Bhushan.

When with the dawn of independence, the chain of national laboratories was established, Dr. Krishnan was called upon to assume charge of the first of those institutions, namely the National Physical Laboratory in New Delhi. He continued to be its director till his death.

A disciple of the great Indian scientist, Dr. C. V. Raman, he collaborated with the Nobel Prize winner in the discovery of the famous Raman effect.

As a recognition of his role in education, he was also made member of the University Grants Commission. He was also a member of the Atomic Energy Commission.

In 1956, Dr. Krishnan was elected a foreign associate of the National Academy of Sciences of the U.S. This was a high honour as the total number of foreign associates is only about 60.

The same year Dr. Krishnan delivered the second series of Sardar Vallabhbhai Patel Memorial lectures organized by the All-India Radio. The theme of his lectures

was the New Era in Science, in which, with subtle wit, he expounded the relation between science and philosophy.

In March this year, Prime Minister Nehru conferred on him the first Bhatnagar award carrying a monetary value of Rs. 10,000, for outstanding scientific work. The citation mentioned Dr. Krishnan's achievements in research in crystal physics, thermionics of metals and semi-conductors and generally in the physics of the solid state. The citation said that Dr. Krishnan's researches were characterized by a combination of theoretical and experimental methods of approach, thoroughness and maturity of treatment and elegance in the presentation of results.

Apart from being a fellow of several societies and academies, Dr. Krishnan was chairman of the scientific advisory committee of Unesco in 1955, Vice President of the International Council of Scientific Unions from 1955 and of the International Union of Pure and Applied Physics between 1951 and 1957, India's representative at Pan-Indian Ocean Science Association from 1957, chairman of the Indian national committee for the International Geophysical Year from 1955, and chairman of the science sub-commission for co-operation with UNESCO.

Dr. Krishnan is survived by his widow, two sons and four daughters.

SARDAR BALDEV SINGH

Sardar Baldev Singh, India's former Defence Minister, died of heart attack in New Delhi on June 29, 1961.

Sardar Baldev Singh was one of the important leaders of the Sikh community who played a notable part in the political negotiations leading to the partition and independence of the country.

Son of Sardar Inder Singh, a leading industrial magnate, Sardar Baldev Singh was born on July 11, 1902 in village Damna in Ambala district. He was educated first at Ambala and later at Khalsa College, Amritsar. After finishing his studies, he joined his father's business and actively continued in it till 1937.

He entered politics in 1937 and elected to the Punjab Assembly on the Akali party ticket. He became the leader of the Panthic Akali Party, a leading group in the Punjab Assembly. Sir Sikander Hayat Khan, the then Premier of Punjab, includ-

ed him in the Unionist Ministry as Minister for Development.

As the leading spokesman of the minorities in the then Punjab Cabinet, Sardar Baldev Singh succeeded in achieving important safeguards for the minorities through what was popularly known as the "Sikander-Baldev Pact." After Sir Sikander's death, when Sir Khizar Hayat Khan Tiwana became Chief Minister of the Punjab, Sardar Baldev Singh again found a leading position in the Punjab Cabinet.

Sardar Baldev Singh was a moderating influence on Sikh politics. He broke with the Akali Party in 1946 because he felt it was consistently veering towards sectarian policies. He then joined the Congress and was a member till his death. Though he broke with the Akali Party in 1946 he always commanded great influence with its leaders. It was because of this that the Akali Party did not oppose him in the 1951-52 general elections.

Baldev Singh was a member of the Congress delegation under Mr. Jawaharlal Nehru that went to England in 1946 for the abortive negotiations with the British Government. Later the British Government finally decided to partition the country before giving freedom to the parts. He was one of the seven Indian leaders called to Government House on June 2 when Lord Mountbatten, Viceroy, unfolded the British Government's plan to partition India. (The other leaders were Mr. Nehru, Sardar Patel and Mr. Kripalani, representing the Congress, and Mr. Jinnah, Mr. Liaquat Ali Khan and Sardar Abdur Rab Nishtar representing the Muslim League).

He entered the Constituent Assembly in 1946 as one of the two Sikh nominees of the Congress. He soon attracted the attention of Mr. Nehru who regarded him as the most influential politician of the Punjab. He was included in the Interim Government in 1946 as Defence Member. He retained that post when the country attained independence and was Defence Minister until 1952.

He was elected to the Lok Sabha in 1952 and again in 1957.

Owing to indifferent health, Sardar Baldev Singh was not taking any active part in politics for sometime before his death. He has left behind his wife and two sons.

* * *

ERNEST HEMINGWAY

The famous American author, Ernest Hemingway, accidentally killed himself on July 2, 1961, at Ketchum, Idaho, while cleaning a gun.

Hemingway was born at Oak Park, Illinois, on July 21, 1898, the son of a doctor devoted to shooting and fishing, and who taught his son to love them too.

After leaving school in 1917 he became a journalist on the Kanas City 'Star' in Missouri.

The American authorities rejected him for military service in World War I because of an eye injury, but he joined the Red Cross as an ambulance driver and served on the Italian front. He returned home in 1919 with two Italian military decorations for valour and an aluminium kneecap which knitted together an injured leg.

He returned to Europe in 1921 to report the war between Turkey and Greece. A year later he settled in Paris as a correspondent for the International News Service. He absorbed the literary idiom of the modern American school, writing in the French capital. The American colony in Paris gave him the material for his satirical book "The Sun Also Rises".

Hemingway learned his craft from such writers as Gertrude Stein, Scott Fitzgerald, James Joyce and Ezra Pound.

By 1926, he had published his first novel, "Fiesta", a tale of expatriate Americans in France and Spain, written in a terse, punch-drunk style which caught the bitter disillusion of the times and won him speedy critical notice.

For the next decade he set the pace for the young school of American writers and the Hemingway style began to spread to Britain.

The fabulous Hemingway "vogue" was born after his first war novel, "A Farewell to Arms", based on what he saw on the Italian front during World War I, was published. In 1930 Hemingway returned to the U.S.A. and bought a home in Florida.

He spent the early thirties living in Florida, and making big game excursions to Africa. This period provided him with the material for such stories as "To Have and Have Not", "Winner Take Nothing", and "The Snows of Kilimanjaro".

Then came the Spanish civil war in 1936. Hemingway knew the country well,

and its people. Spain has inspired some of his best writing.

He threw himself into the fight against Franco with all his money and energy. He drove ambulances and worked as a war correspondence for the North American Newspaper Alliance, produced a film and, ultimately wrote the best-seller, "For Whom the Bell Tolls".

In World War II, he sailed his yacht around the Caribbean as a U-boat chaser, served as a war correspondent, and, against orders as a journalist, led a French resistance group in the attack on Paris.

In 1950 he published his first big novel for 10 years—a world war true story called "Across the River and into the Trees". This story of an ageing American colonel's reminiscences of the two wars, set against a post-war Trieste background, brought scores of adverse reviews.

A shorter novel, "The Old Man and The Sea" was hailed as better written, for this novel, Ernest Hemingway received the Pulitzer Prize in 1953 and, in 1954, he received the Nobel Prize for literature.

It was the climax to a career which had won other distinctions like the gold medal of the Limited Editions Club for his popular novel, "For Whom The Bell Tolls," a Book-of-the-Month choice, published in 1940. The award is made every three years for the book which is "most likely to attain the stature of a classic".

Hemingway and his fourth wife, formerly Mary Welsh, a Chicago-born journalist and war correspondent, whom he married in 1946, spent most of their time on a beautiful farm called Finca Veggio above the Caribbean near Havana, in Cuba. Hemingway wrote there, interrupting his work for lengthy shooting and fishing jaunts, or for roisterous evenings with Havana friends.

In 1954 he was involved in two air crashes in East Africa when he and his wife were on safari. They crashed in bush country near Urchison Falls, escaped, boarded a search plane, and crashed again.

In 1959 Hemingway spent six months in Spain watching bull-fights and writing an appendix to his famous book about them, "Death in the Afternoon".

Late in 1960, Hemingway ran into trouble with the Spanish newspapers over his lengthy study of bull-fighters—"The

Dangerous Summer"—when it began appearing in America's "Life" magazine. The book, mainly about the intense rivalry between ace matadors Luis Miguel Dominguin and Antonio Ordóñez, angered Spaniards, because of a critical reference to Manolete, the matador and national hero who died after being gored by a bull in 1947.

In November, 1960, the author began having treatment at the Mayo Clinic in Rochester, Minnesota, for hypertension, and although discharged in January, 1961, returned for the further attention in April. He was discharged late in June only a week before his death.

* * * KHASHA SUBBA RAO

Mr. Khasha Subba Rao, India's veteran journalist and Editor of 'Swarajya Weekly', died in Madras on June 16, 1961. He was born on Jan. 20, 1896 in Nellore. He had his education in the V.R. College there and the Presidency College, Madras, graduating in Philosophy.

From Nellore, he gravitated to Madras, where he joined the English daily, the "Swarajya," which had been founded by Mr. T. Prakasam. It soon became clear that Mr. Subba Rao had found his true profession. Perhaps the most notable of the band which sustained the paper in all its tribulations, Mr. Subba Rao wielded a trenchant pen. But, though he was a powerful writer, he was also a fair one. He was not given to hitting the enemy below the belt. It was also his endeavour to conduct the discussion on the highest plane.

His journalistic career was varied. He served the **Indian Finance** of Calcutta as Associate Editor, and subsequently the **Free Press Journal** of Bombay. As Editor of the latter, he defied a Government order banning the publication of uncensored news on the Quetta earthquake. The Bombay Government thereupon forfeited the security of Rs. 40,000 which the paper had been required to furnish.

He again became the editor of **Swarajya** in 1938. As Editor of the **Indian Express** he was associated with it until 1944. Always a man of independent views, he disagreed with many newspaper proprietors and was not afraid to resign lucrative positions when he felt that his principles were being trespassed upon. Mr. Subba Rao took a full part in the freedom struggle. He went to prison twice. He was

severely beaten by the police when picketing shops, selling foreign cloth in Madras. The effects of the beating remained with him until the end.

A new phase in his career opened in 1946 when Mr. Subba Rao edited the weekly, **Swatantra**. He gathered around him a band of young writers, to whom he gave every possible encouragement. His weekly articles under the title Side-lights, attracted great attention.

After ten years, Mr. Subba Rao started another weekly, "Swarajya" which also, under his inspiring leadership, lost little time in establishing itself. Mr. C. Rajagopalachari was associated with him in this venture. Mr. Subba Rao served as President of the Southern India Journalists' Federation.

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FOREIGN EVENTS

MILITARY REVOLT IN ALGIERS

French troops led by retired Generals opposed to President Charles de Gaulle's policy in Algeria, seized Algiers on April 22, 1961 and declared that they had saved French Algeria.

They arrested General Ferhand Gambiez, Commander-in-Chief in Algeria, and other civil and military authorities loyal to President de Gaulle, and declared a State of Emergency in the capital.

The French Cabinet, meeting under the chairmanship of General de Gaulle on April 22 decided to proclaim a State of Emergency in Metropolitan France.

The insurgent troops, including paratroopers, surrounded public buildings in Algiers and cut communications between Algiers and Metropolitan France.

The French Information Minister, Mr. Roger Frey, told newsmen it appeared that the coup was led by General Maurice Challe, a former Commander-in-Chief, and General Andre Zeller, a former Army Chief of Staff.

(There was strong opposition among Right-wing French settlers in Algeria to President de Gaulle's proposals to give Algeria the right to determine its own future. The opposition culminated in preceding weeks in a chain of bomb incidents in France and Algeria.)

On April 22 **Algiers Radio** broadcast what was described as a Proclamation by the rebel Generals announcing that the "civil and military representatives of the regime of treason have been arrested."

The Proclamation, said to be signed by Gen. M. Challe, Gen. A. Zeller, Gen. Edmond Jouhaux and Gen. Raoul Salan, said:

"The Army has taken control of the Algerian-Saharan territory. The operation was carried out without a shot being fired. During the night, French Algeria had been saved by the French Army."

At midday on April 22, the French Government said in a statement that it was no longer in a position to exercise authority in Algiers and that the civilian

and military authorities were unable to perform their functions.

On April 23, leaders of the revolt claimed that they controlled the largest part of Algeria, including all the airfields.

In Paris, the French authorities admitted that the revolt in Algeria was spreading, but that Foreign Legion units in Western Algeria had refused to join the rebels.

On April 23, President Charles de Gaulle took over absolute personal power in France to meet the threat of civil war posed by the Army insurrection in Algeria.

In a broadcast from Paris on the night of April 23, the French Prime Minister, M. Michel Debre, confirmed claims by the rebel Army units in Algeria that they had occupied all strategic points in the territory.

He said that the Government had reason to believe that the rebels in Algeria would shortly attempt to invade France by air, particularly the Paris region. However, steps were being taken to meet the threat. Guards at strategic points in France had been re-inforced and a large number of people had been taken into custody.

On April 24, the French Government announced an indefinite extension of the State of Emergency.

In Tunis, the Algerian nationalists issued a statement saying that they would oppose the military take-over in Algeria with all their resources and with the help of friendly countries.

The first shots of the revolt were fired on April 25 at the great naval base of Mers-el-Kebir, near Oran, in western Algeria. A French warship fired warning shots to repulse rebel paratroopers trying to move into the base.

The revolt collapsed shortly after midnight on April 26.

Mobile gendarmes loyal to President de Gaulle sped into Algiers in a well coordinated strike. Armoured cars and trucks appeared at strategic points in the city.

The collapse of the rebellion was offici-

ally announced in a **communiqué** issued by the office of the President of the Republic, General de Gaulle on April 26.

Ten minutes earlier, an official of the French Information Ministry in Paris stated that the whole of Algeria was under the control of the Government. Life returned to normal in Paris, as emergency measures were withdrawn.

Gen. Maurice Challe, ring-leader of the four-day revolt, who was brought to Paris, was lodged in the State Prison and formally charged with high treason and armed mutiny, offences which are punishable with death.

The police in Algeria began rounding up soldiers, airmen and hundreds of civilians who were suspected of taking part in the rebellion.

On April 29, the French Government announced the breaking up of seven crack units which participated in the Army mutiny. All officers and men involved were considered prisoners. The arrests were said to total 12,000 officers and men.

An Information Ministry spokesman told newsmen that in addition to the first Foreign Legion Paratroops Regiment, ordered to be dissolved, the Government had ordered the disbandment of the 14th and 18th Cassair (Alpine) paratroops regiments. The Air Commandoes Air France units formed to fight on the ground would also be disbanded.

It was officially announced in Paris on May 6 that Gen. Andre Zeller, one of the leaders of the Algerian rebellion, had been arrested. An Interior Ministry spokesman said that Gen. Zeller had surrendered himself to the Police Prefect in Algiers on the morning of May 6. On July 11, Gen. Salan and seven other generals and colonels were sentenced to death in absentia.

* * *

RACIAL RIOTS IN THE U.S.A.

A series of racial riots occurred in Alabama during the week May 14-21, 1961, subsiding only after the Federal Government had sent a strong force of Federal marshals to the State and the Governor, Mr. John Patterson, had proclaimed martial law in Montgomery, the State capital. The riots arose out of a demonstration by an inter-racial group, calling themselves "freedom riders," who set out to travel from Washington to New Orleans in order to challenge segregation in inter State buses and in res-

taurants and waiting rooms at inter-State bus stations. All these practices have been declared illegal by the Supreme Court, but are still enforced in some Southern States. The demonstration was originally organized by the Congress of Racial Equality (C.O.R.E.), an inter-racial organization with about 25,000 members, many of whom are students.

A party of White and Negro "freedom riders" left Washington in two buses on May 4. On reaching Anniston (Alabama) on May 14, **en route** for Birmingham, one of the buses was stoned by a crowd and set on fire. The second bus reached Birmingham later the same day, but although the Federal Bureau of Investigation had warned the Birmingham police that there was a danger of violence, no police were present at the bus station and the "freedom riders" were assaulted by a mob and severely beaten. One of the rioters was officially stated to have admitted after arrest that the riot had been organized by the Ku Klux Klan.

At the request of the U.S. Attorney-General, Mr. Robert F. Kennedy, Governor Patterson promised on May 15 to provide protection for buses travelling through Alabama, but later the same day he declared that "the citizens of this state are so enraged that I cannot guarantee protection for this bunch of rabble-rousers." The "Freedom riders" in consequence abandoned their plan and returned home by air. On May 17, however, a number of White and Negro students arrived in Birmingham from Nashville (Tennessee) with the aim of carrying out the original plan. When they attempted to board buses for Montgomery they were taken into "protective custody" by the police, who took them to the Tennessee border; later, however, the students returned to Birmingham by car.

Eighteen White and Negro students travelled from Birmingham to Montgomery on May 20, but on alighting they were assaulted by a crowd of about 200 people, some of them armed with baseball-bats, sticks, metal bars, or knuckle-dusters. After the rioting had been in progress for about 10 minutes the police intervened, but it flared up again shortly after and the mob, which had grown to over 1,000, began attacking local Negroes unconnected with the "freedom riders." Two Negroes were waylaid by a gang of boys, who set one's clothes on fire and broke the other's leg.

The rioting ended only when the police used tear-gas, after at least 20 people had been injured.

Mr. Robert Kennedy ordered a force of over 500 Federal marshals to be sent to Alabama "to guarantee safe passage in inter-state commerce." He asked the Montgomery Federal Court to enjoin the Ku Klux Klan, the National States Rights Party, and certain individuals not to interfere with peaceful inter-State travel; and directed the F.B.I. to investigate the responsibility for the riots.

(The statute under which the marshals were sent to Alabama was passed in 1871, when the Ku Klux Klan was engaged in terrorizing the emancipated Negro slaves, and was first employed by President Grant to suppress its activities in South Carolina. The law states that the President may use the militia, the armed forces, or other means to suppress any violence or unlawful conspiracy in a State, if a class of citizens is deprived of a constitutional right and "the constituted authorities of that State are unable, fail, or refuse to protect that right.")

During the evening of May 21 a violent crowd of about 500 people threatened to attack a church in Montgomery where the Rev. M. Luther King, the well-known Negro leader, was addressing a mass meeting of Negroes, at which the "freedom riders" were present. The Federal marshals, who were later joined by local police, held the mob at bay with tear-gas and hoses. After several hours the situation became so threatening that Mr. Patterson proclaimed martial law. The State National Guard, armed with rifles and fixed bayonets, finally dispersed the crowd and escorted the Negroes to their homes. A number of rioters were arrested but were released on the following day without being charged.

Mr. Kennedy announced on May 22 that 200 more marshals would be sent to Montgomery, as he had not received an assurance from Mr. Patterson that law and order would be maintained; he pointed out that only the marshals had averted "major bloodshed" on the previous evening before the police arrived. Only minor incidents occurred in Montgomery during the day, however, and the marshals were in consequence withdrawn from the city to a nearby air base. Mr. Kennedy ordered all but 100 of the marshals to be withdrawn from Alabama on May 25, after the "freedom rid-

ers" had left the State, and the proclamation of martial law was lifted by Governor Patterson on May 29.

A group of 27 "freedom riders" who left for Jackson on May 24 were arrested shortly after their arrival on charges of disorderly conduct and refusing to leave a White waiting room when ordered by a policeman. Further groups continued to arrive in Jackson during the next three weeks, however, and were all arrested on similar charges. By June 11 the number of arrested had risen to 110; they included Mr. Mark Lane (a White member of the New York State Legislature) and Mr. Percy Sutton (head of the New York branch of the National Association for the Advancement of Coloured People), who were arrested on June 8 when they entered a White waiting room at the city airport, and eight persons who arrived from New Orleans by train on May 30 to test segregation regulations at railway stations. In Montgomery, the chaplain of Yale University, three White professors from northern universities, and four Negro students were arrested on May 25 when they entered the White waiting room at a bus station.

The Montgomery Federal Court issued an order on June 4 (i) restraining the C.O.R.E. and other organizations from sponsoring and financing "freedom riders"; (ii) enjoining the Montgomery police force and the Ku Klux Klan not to interfere with inter-state travel. A Justice Department spokesman said that the injunction against the "freedom riders" had been issued against the Federal Government's wishes.

Mr. Kennedy asked the Inter-State Commerce Commission on May 29 to issue regulations strictly forbidding racial segregation on inter-State buses and at inter-State bus stations.

In this petition he pointed out that the Inter-State Commerce Act forbade inter-State bus companies to subject any person to "any unjust discrimination or any undue or unreasonable disadvantage in any respect whatsoever"; that in 1955 the Commission had banned racial segregation on trains and buses and in railway waiting-rooms; and that the Supreme Court had ruled in 1960 that the Act prohibited segregation in bus station restaurants serving inter-State passengers. He therefore proposed that all inter-State bus companies should be required to display signs on their

buses stating that all seats were available to any passenger irrespective of colour, and in bus stations stating that all facilities were available to all passengers, and that any interference with these regulations should be reported to the Commission within 15 days.

Mr. Robert Shelton, "Grand Wizard" of the Alabama Knights of the Ku Klux Klan, announced on May 22 that all Klan organization in the United States would amalgamate to prevent further integration by "all measures necessary." Mr. Shelton was one of the Klan leaders against whom an injunction had been issued by the Montgomery Federal Court.

PRESIDENT KENNEDY'S VISIT TO EUROPE

President Kennedy of U.S.A. paid a three-day State visit to France from May 31 to June 2 during which he had discussions with President de Gaulle, followed by a two-day visit to Vienna on June 3-4 for discussions with Mr. Khrushchev and a one-day visit to London on June 5 for talks with Mr. Macmillan. Mrs. Jacqueline Kennedy accompanied her husband on his European mission.

More than a million Parisians gave President and Mrs. Kennedy an enthusiastic welcome when they drove in an open car on May 31 from Orly airport to the Elysee, where the French and U.S. Presidents had two private conversations lasting 2½ hours in all. The White House Press Secretary, Mr. Pierre Salinger, indicated that Berlin had been discussed at the morning meeting, while in the afternoon the two Presidents had discussed South-East Asian problems, with special reference to the Laos situation.

The Presidents had two further private conversations at the Elysee on June 1, being alone for nearly three hours except for the interpreter. During the day the U.S. President also visited the Palais de Chaillot to address the North Atlantic Council: he declared that it was "the basic conviction of the people of the United States that our security is inextricably tied up with the security of Europe," and reaffirmed America's determination to honour all her commitments under NATO Alliance.

After an early morning visit on June 2 to General Norstad's SHAPE headquarters near Versailles, President Kennedy return-

ed to the Elysee for further private talks with General de Gaulle, after which he attended a luncheon given in his honour by French, American, and British press correspondents. The State visit to France ended in the afternoon with a final meeting at the Elysee between the two Presidents, at which M. Debre, M. Couve de Murville, and Mr. Dean Rusk were present. The following communique was issued at the conclusion of President Kennedy's visit:

"The two Presidents discussed the principal issues in the present international situation with regard both to relations between the United States and France, and their policies in all parts of the world. In the course of these discussions, which were both direct and searching, they examined the position of the two countries with regard to the Soviet Union and the Communist world; and the activities of these two countries in Africa, Asia, and Latin America, including aid to under-developed countries. They also examined means for strengthening the Atlantic Alliance, that fundamental association of free nations.

"These conversations have shown the fundamental agreement which exists between the two Presidents. In particular, President de Gaulle and President Kennedy confirmed the identity of their views on their commitments and responsibilities towards Berlin.

"The conversations... allowed the President of France and the President of the United States to know each other and to set forth fully the respective position of the two countries, taking into account the interests and responsibilities incumbent upon each of them. Thus the talks have made an essential contribution to the development of relations between France and the United States.

"The deep solidarity which binds the two nations together in the tradition of Franco-American friendship remains the basis of these relations."

Before flying to Vienna for his meeting with Mr. Khrushchev, President Kennedy had discussions in Paris during the evening of June 2 with Mr. Rusk, Mr. Averell Harriman (the President's Ambassador-at-large), and Mr. Lucwellyn Thompson, the U.S. Ambassador in Moscow.

Mr. Khrushchev, accompanied by Mrs. Nina Khrushcheva, had meanwhile arrived

in Vienna on June 2 by train from Bratislava, where he had discussions with the Czechoslovak President, Mr. Novotny, the Prime Minister, Mr. Siroky, and other Czechoslovak leaders. The Soviet Premier was greeted in Vienna by President Scharf, Chancellor Gorbach, and a number of diplomats, among them Mr. Molotov, the former Soviet Foreign Minister and now chief Soviet representative at the International Atomic Energy Agency, which has its headquarters in the Austrian capital.

President Kennedy and Mr. Khrushchev had their first meeting at the U.S. Embassy on June 3, being alone for more than three hours except for their interpreters. After the talks on this date Mr. Salinger and Mr. Mikhail Kharlamov (head of the Soviet Foreign Ministry Press Department) held a joint press conference at which Mr. Salinger stated that the two statesmen had discussed a wide range of questions concerning Soviet-American relations and also the world situation generally; Mr. Kharlamov added that the talks had been "fruitful."

The U.S. President and the Soviet Prime Minister continued their talks on June 4 at the Soviet Embassy, accompanied by their advisers, who included Mr. Rusk and Mr. Llewellyn Thompson on the American side and Mr. Gromyko and Mr. Menshikov (Ambassador in Washington) on the Russian side. The talks ended in the afternoon with the publication of the following communique, which was released to the Press jointly by Mr. Salinger and Mr. Kharlamov:

"President Kennedy and Premier Khrushchev have concluded two days of useful meetings during which they have reviewed the relationships between the United States and the Soviet Union as well as other questions that are of interest to the two States.

"Today (June 4), accompanied by their advisers, they discussed the problems of nuclear testing, disarmament, and Germany.

"The President and the Chairman reaffirmed their support of a neutral and independent Laos under a government chosen by the Laotians themselves and of international agreements for ensuring that neutrality and independence. In this connexion they have recognized the importance of an effective cease-fire.

"The President and the Chairman have agreed to maintain contact on all questions of interest to the two countries and the whole world."

Mr. Khrushchev left by plane for Moscow on June 5. He held no press conference but said at Vienna Airport that he hoped his talks with President Kennedy would help towards "the building of lasting peace among States."

President and Mrs. Kennedy arrived at London Airport in the evening of June 4, staying overnight at the London residence of Prince and Princess Radziwill (the Princess Radziwill is Mrs. Kennedy's sister). On June 5, the President had a long conversation with Mr. Macmillan at Admiralty House lasting nearly 3½ hours; they were alone except for some 40 minutes when they were joined by Lord Home, the Foreign Secretary, and Mr. McGeorge Bundy, special assistant to the President for national security affairs. The talks, at which President Kennedy gave Mr. Macmillan an account of his meetings with General de Gaulle and Mr. Khrushchev, were described by a Foreign Office spokesman as "very good, very friendly, very serious."

In the afternoon President and Mrs. Kennedy went to Westminster Cathedral for the christening of the infant daughter of Prince and Princess Radziwill, while in the evening they dined at Buckingham Palace as the guests of H.M. the Queen and the Duke of Edinburgh. President Kennedy left London Airport for Washington at 11 p.m. the same night, Mrs. Kennedy remaining privately in London for a few days to stay with her sister.

You'll never have a quiet world till you knock the patriotism out of the human race. —**Bernard Shaw**

* * *

All men love to appropriate to themselves the belongings of others; it is a universal desire; only the manner of doing it differs. —**Le Sage**

* * *

We learn wisdom from failure much more than from success. We often discover what will do, by finding out what will not do; and probably he who never made a mistake never made a discovery.

—**Mamuel Smiles**

HOME AFFAIRS

INDIA MAKES SUPERSONIC FIGHTER

On June 24, 1961 India joined the only five other nations in the world—Russia, America, United Kingdom, France and Sweden—by successfully test-flying its first prototype of the supersonic fighter named HF-24 at Bangalore.

Designed at the Hindustan Aircraft factory by Dr. Kurt Tank, a German, one of the world's leading aircraft engineers, the aircraft was in the air for about 20 minutes when the chief test pilot, 41-year-old Wing Commander Suranjan Das, spun the aircraft twice and also climbed up sharply at great speed to demonstrate its easy manoeuvrability.

It has taken nearly five years to build up the prototype.

Addressing a gathering of over 50,000 people assembled along the new runway of the Hindustan Airport on the occasion, Union Defence Minister, Shri Krishna Menon, described the event as "a memorable one" in the history of the aircraft industry in the country as well as her national life.

Shri Menon said that such an aircraft (HF-24) was necessary to prevent those who had "evil designs" on India from implementing their desires. The sky should get clear of the aggressors, he added. He hoped that the new aircraft would join the squadron service of the Air Force in the near future.

Shri Menon revealed that the plane had been built with nearly 50 per cent of indigenous material.

Giving the background for the project, Shri Menon said that it was the Air Force that first mooted the project some four or five years ago when the late Air Marshal Mukherjee was the Chief of the Staff. The then Minister in Charge of Defence, Shri Mahabir Tyagi, put forward the proposal to Prime Minister Nehru and obtained his approval.

Shri Menon said that the performance of the plane would be developed further by fitting the aircraft with more powerful engines.

In appreciation of the services of the workers of the factory numbering about 17,000, Shri Menon announced a reward of Rs. 20 for those whose salary was below Rs. 500. Those who were immediately connected with the project numbering about 1,000 excluding engineers, would get Rs. 50 each for their work.

Shri Menon also paid a tribute to Wing Commander Suranjan Das and said that he was one of the foremost test pilots not only in India but also in the world.

Wing Commander Das, son of Mr. S. R. Das, former Chief Justice of India, has to his credit a total flying hours of 2,700 in 35 different types of air-craft. Born in Calcutta, Wing Commander Das joined the IAF in 1943 and had undergone training in Canada under the Empire Training Scheme. He joined the factory on 18th May 1961 as the chief test pilot.

Powered by two-Bristol Siddley orpheus Turbo-jet engines, also built in the factory, the HF-24 has highly swept-back thin wings, needle nose and a beautifully stream-lined area-ruled fuselage.

In flight, it looks like an arrow shooting forward. It incorporates many advanced aerodynamic concepts which make its flying safe and easy at slow speeds as well as at high speeds, according to factory authorities, who added that slow-speed handling characteristic had been thoroughly studied at the wing tunnel of the Indian Institute of Science in Bangalore. These experimental data had further been proved by flying a full-size glider incorporating the same aero-dynamic features.

It is stated that the aircraft has also the most up-to-date devices to ensure maximum safety to the pilot. For example, should something go wrong with the aircraft, the pilot could bale-out by using his ejection seat while the aircraft is still running along the runway. Also if something goes wrong with the aircraft at extreme altitudes, a series of automatic operations will allow the pilot to land safely from heights of 40 to 50 thousand feet even though he might have become unconscious soon after ejection.

AID INDIA CLUB'S ASSISTANCE

The World Bank announced in Washington on June 2 that six nations and the World Bank had agreed to give India more than \$2,000 million in economic development aid.

The Bank announcement said that the aid would help India to launch her Third Five-Year Plan with confidence that its aims would be achieved.

Countries agreeing to provide the aid, following talks which ended in Washington on June 1 were Canada, West Germany, Japan, Britain and U.S.A., with France joining the Consortium during the talks.

Also joining in the Agreement was the World Bank and the International Development Association (IDA), which is an affiliate of the World Bank.

The Governments of Austria, Denmark, Norway and Sweden and the International Monetary Fund sent observers to the talks between the members of the Consortium called the "Aid-India Club", which has provided assistance for India's earlier development plans.

The World Bank announcement said that the following commitments were indicated at the meeting of the Consortium, subject to legislative action or other necessary authorization:

U.S.A.—\$1,045 million; Britain—\$250 million; Canada—\$56 million; France—\$30 million; West Germany—\$425 million (including \$61 million for the Rourkela steel plant); Japan—\$80 million; World Bank and IDA—\$400 million; Total—\$2,286 million.

It added: "The Consortium was encouraged by the economic progress made by India during her Second Five-Year Plan and recognized the importance of maintaining the momentum of India's development.

"It considered that in relation to India's needs the broad objectives of the Third Five-Year Plan (1961-66) were reasonable, the Plan itself was well conceived and that India had demonstrated a capacity to make effective use of foreign aid."

This was by far the largest commitment of economic aid ever made by a group of Western nations to a country.

At the end of the three-day meeting in Washington, the Consortium agreed to make available £1,295 million over the next 12

months and \$930 million for the second year of the Third Five-Year Plan.

America made a surprise proposal in April, 1961 of providing \$1,000 million over the next two years provided the other nations matched this amount.

US officials noted that the funds were more than matched for the first year of the Third Plan. The commitments for the second year of the Plan fell short by about \$200 million.

In addition, U.S.A. had already agreed to make available about \$1,300 million worth of surplus agricultural commodities to India. Canada would also make a grant of wheat, but the amount was not disclosed.

It was also announced that another meeting of the Aid-India Club would be held next Fall in an effort to consider what further resources might be made available.

The Consortium, for the time being, concentrated its attention on the first two years of the Plan and sought to provide immediate support for India's balance of payments and to enable it to proceed in an orderly manner with the placing of new orders overseas for the Third Plan.

The new commitments now being made will be repayable over many years and on extremely easy terms.

As matters stand, these various commitments will approximately cover India's prospective balance of payments deficit for 1961 and 1962 and go a long way towards covering the deficit of the succeeding year.

There was general satisfaction at the outcome of the Consortium's talks, which showed how the concept of aid has expanded in the world.

The other points made were:

(1) The US contribution will be largely tied to buying in America; so will the West Germany and British contributions be to their respective countries.

(2) The US contribution is not likely to be tied to individual projects.

(3) About \$100 million of the West German aid will be on a 25-year loan basis at about three per cent. Repayments will start after a grace period of seven years.

(4) The Soviet Union's commitments to the plan now amount to about \$720 million.

* * *

INDIANS CLIMB NILKANTHA PEAK

The 21,640-foot-high peak of Nilkantha which had defied as many as six expeditions by famous mountaineers in the last quarter of a century was climbed by an Indian team on Tuesday, June 13, 1961 by Mr. O.P. Sharma and two sherpas, Phurba Lapsang and Dhakpa Giyal.

Rising in a single sweep five miles west of Badrinath Nilkantha has been described as the most beautiful, the most difficult, and the most elusive peak in the central Himalayas.

It has been learnt that the assault on the summit was organised in two phases. The route was prepared in the first phase from a height of 21,200 feet upwards to about 200 feet from the summit. The difficult task was assigned by the leader to Flt.-Lt. A.K. Chaudhury, who had climbed the 23,420-foot-high Choukhamba in 1959 and two sherpas.

After this had been completed successfully, Mr. O.P. Sharma with his two sherpa companions made the ascent on June 13. The leader, Captain Narinder Kumar (27) himself stayed back 400 feet below the summit to co-ordinate the final plan.

Mr. Sharma (26) was the youngest member of the Nilkantha team and this was his first expedition although as a public school master at Lawrance School in Sanawar, he had organised many treks for the boys.

He completed a course at the Himalayan Mountaineering Institute at Darjeeling with credit about two years ago. Tenzing Norgay, Director of Field Training at the H.M.I., said of Mr. Sharma that he would make a very good climber. The Everest hero's prophecy has come true.

The President, Dr. Rajendra Prasad, said: "Successful ascent of yet another Himalayan peak by the Indian Nilkantha expedition is indeed thrilling news and I send the team and its leader, Captain Kumar my hearty congratulations and good wishes.

"Let us hope ascent of such peaks which are woven into the fabric of our mythology is symbolic of our determination to reorientate our people's life."

The leader of the expedition, Capt. Kumar of the Kumaon Regiment, was a member of the first summit party of the Indian Everest expedition in 1960 and climbed 28,300 feet of the world's highest

mountain, only about 700 feet short of the top. Earlier, in 1958, he led the successful Army and Navy expedition to Trishul (23,360 feet.)

The six-member expedition sponsored by the Indian Mountaineering Foundation assembled at Badrinath on May 31 and set out the same day on its way to the base camp. Besides the leader and Mr. O.P. Sharma, the other members of the team were Flt.-Lt. A.J.S. Grewal (31) who climbed 24,000 feet of Everest in 1960; Flt.-Lt. A.K. Chaudhury (36) better known in Nepal as "Ang Chaudhury" who climbed Choukhumba in 1959 and accompanied expeditions to Everest, Nanda Devi and Nilkantha itself once before in 1959; Capt Mulk Raj (28) who accompanied Maj. Jayal's expedition to Nanda Devi; and Lt. R.C. Ray (27) of the Army Medical Corps, the doctor of the expedition.

Tenzing Norgay selected for the expedition a team of five sherpas. The sherpas accompanying the party were Tashi, Pasang Lakhpa, Nawang Siring, Phurba Lopsang and Lhakpa Cyalbu. Of the five, three had carried loads up to the South Col (26,000 feet) on Everest in 1960 and one up to the last camp at 27,600 feet.

The following Himalayan peaks of above 20,000 feet have so far been climbed by Indian expeditions:

Trishul (23,360 ft.)—1951, 1956, 1958, 1961.

Panch-Chuli (22,650 ft.)—1953.

Abi Gamin (24,130 ft.)—1953.

Kamet (25,447 ft.)—twice in 1955.

An unnamed peak (24,000 ft.) near Saser Kangri in Ladakh—1956.

Cho Oyo (26,867 ft.)—1958.

Mrigthuni (22,490 ft.)—1958.

Nandakot (22,510 ft.)—1959.

Bandar-Punch (20,720 ft.)—1959.

Chaukhumba (23,240 ft.)—1959.

Nanda Ghunti (20,700 ft.)—1960.

Annapurna III (24,858 ft.)—1961.

Nilkantha (21,640 ft.)—1961.

Maiktoli (23,320 ft.)—1961.

Devistan (22,000 ft.)—1961.

The Everest expedition last year reached a height of 28,300 feet before being beaten back by adverse weather.

Nilkantha, the pygmy of the Garhwal range, is no ordinary mountain. It has been challenged by six expeditions but has beaten them all back. The last unsuccessful attempt was made by an I.A.F. expedi-

tion under the leadership of Air Commodore (now Air Vice Marshal) S. N. Goyal. Nilkantha is unassailable and in the world of mountaineers this is well known. It has been explored but never conquered. Men like the Briton, Frank Smythe, came as early as 1937 to tame the defiant peak, but went back saying Nilkantha was the "Queen of Garhwal, the most beautiful and difficult peak."

Edmund Hillary, was among the 1951 New Zealanders who picked up from where the Swiss and the British had left off in two separate attempts in 1947. Tilly, the renowned Britisher, found the call of Nilkantha irresistible but also went away without success.

* * *

MAIKTOLI AND TRISUL PEAKS CLIMBED

The 23,360-foot-high summit of Trisul in the Garhwal area of the Himalayas was climbed by some members of the Indian expedition of Nanda Devi, according to a message received in New Delhi on July 5, 1961, from the leader, Mr. Gurdial Singh.

Though details were lacking, the leader had stated in his brief telegram that the summit was scaled in daylight. An attempt to climb it in moonlight, as had been originally planned, proved unsuccessful due to a sudden weather setback when the climbers were at a height of 21,000 feet.

Trisul is the third peak and the highest of the group in the south-eastern region of the Nanda Devi massif, to be climbed by members of the expedition.

After an attempt to scale Nanda Devi had to be called off due to an early onset of monsoon conditions, the leader decided to negotiate other peaks in the southern region. Devistan (22,000 ft.) was climbed on June 16 and Maiktoli (23,320 ft.) five days later (June 21).

Maiktoli lies on the southern rim of the Nanda Devi sanctuary. The successful summit party included Suman Dubey of the Doon School, who was the youngest member in the Nanda Devi expedition. This peak has been climbed once before by Mr. Eric Supton with two sherpas in 1934.

Trisul has been climbed thrice before by Indian mountaineers—in 1951 under the leadership of Mr. Gurdial Singh himself, again in 1956 (leader Mr. Neki Bunshah) and in 1958 (leader Capt. N. Kumar). This

peak in the Garhwal Himalayas was first climbed as far back June 12, 1907 by Dr. T.G. Longstaff and H. Brocherel, and a second time 26 years later by Lt. P.R. Oliver.

Games and Sports

(Continued from page 772)

world as "Yabba," his real name was Stephen H. Gascoigne. Right up until his death in January, 1942, he was a familiar sight on "The Hill"—the uncovered public section of the Sydney cricket ground.

For more than 40 years he amused both players and spectators with uninhibited comments on play. His loud gravel-voice came right around the large arena. He never missed an important cricket match on the Sydney cricket ground. He always arrived early, with a hamper containing his lunch and two bottles of beer. Sometimes he wore a white coat like the umpires—and always he was surrounded by a large group of admiring fans.

Very few cricketers who played on the Sydney cricket ground between 1900 and 1940 escaped his criticism. He often greeted some unlucky bowlers with the acid comment: "Your length is lousy, but you bowl a good width."

The late Charlie Kelleway once incurred "Yabba's" wrath when he batted for a long time without scoring. When Kelleway at last hit his first single, "Yabba's" gravel-voice could be heard all over the ground: "Whoa there. He's bolted."

Some of "Yabba's" comments have become cricket by-words—such as "Get a Bag" to a fieldsman who has dropped an easy catch.

All of "Yabba's" comments were always taken in good part by his victims. Most players would wave their arm in his direction in acknowledgement, and some sought him out after the match to exchange a few words.

One commentator stated: "With salty comments to players and umpires, Yabba made comedy of even a dull day's cricket."

The memorial to the famous barracker will be in the form of an inscribed brass plate. It will be placed near the spot where he used to sit.



CRICKET

England-Australia Test Matches

Second Test: Australia (Tourists) defeated England in the second test match played at Lords on June 22, 23, 24 and 26 by five wickets, sparing a complete day to play. Scores: Australia—340 and 71 for 5. England—206 and 202.

In the first innings Davidson captured 5 wickets for 42 runs and in the second innings McKenzie took 5 wickets for 37 only.

The only centurian was Lawry (Australia) who scored 113 runs in the first innings.

The Australian team was captained by Neil Harvey because Richie Benaud was considered unfit to play due to some illness.

Third Test: England (Hosts) dramatically defeated Australia, sparing two complete days to play, in the third match played at Leeds on July 6, 7, and 8 by eight wickets. England thus equalled the rubber with two tests to go. Scores: England—299 and 62 for 2; Australia—237 and 120.

Trueman bowled England to the verge of victory by capturing six Australian wickets in the second innings for merely four runs with his last 45 balls. His innings analysis was 6 for 30 and match analysis 11 for 88.

HOCKEY

India-New Zealand Test Matches

The Indian wanderers, an Indian Hockey Team, led by Udham Singh, which left India for New Zealand in the last week of May played 20 matches there, including three test matches.

Indians won the rubber by defeating New Zealand in the first two matches on June 5 at Auckland and July 1 at Wellington by 2-0 in each test. The third test match played in Christchurch on July 8, ended in a 1-1 draw.

TENNIS

75th Wimbledon Championships

Aussies dominated during the fortnight of the 75th Wimbledon Championships which commenced on June 26 in London

by capturing all but the two women's titles. Women's singles title went to the British girl Angela Mortimer. (A British girl, Dorothy Round, had last won this title 27 years ago in 1937.) The following are the final results:

Men's Singles: Rod Laver (Australia) beat 'Chuck' McKinley (U.S.) 6-3, 6-1, 6-4.

Women's Singles: Angela Mortimer beat Christine Truman 4-6, 6-4, 7-5 in the all-England women's singles final.

Men's Doubles: Roy Emerson and Neale Fraser beat Bob Hewitt and Fred Stolle, 6-4, 6-8, 6-8, 8-6 in the all-Australian men's doubles final.

Women's Doubles: Karen Hantze and Billie Jean Moffitt (U.S.) beat Lehane and Margaret Smith (Australia) 6-3, 6-4.

Mixed Doubles: Fred Stolle and Lesley Turner of Australia, beat Bob Howe (Australia) and Buding (Germany) 11-9, 6-2.

India's Ramanathan Krishnan, seeded No. 7, reached the semi-finals of the men's singles, like last year, but was defeated by this year's champion Rod Laver.

RECORDS

World High Jump Record

Valery Brumel set a new world record on 18th June, 1961, for the high jump with a leap of 2 metres and 13 centimetres.

World Lift Mark

Tommy Kono of the United States set a new world lifting record of 153.5 kg. in the light-heavyweight press at Tokyo on 17th June, 1961.

Kono lifted 153.5 kg. in the press in his fifth try. The existing mark of 151 kg. was set in Russia last year.

Yamanaka Breaks Own World Mark

Tsuyoshi Yamanaka, Japan, broke his own world record for the men's 100 metres freestyle during the Western Japan swimming championships at Osaka (Tokyo) on 24th June, 1961.

Yamanaka, silver medalist in the Olympic 400 metres, clipped 0.3 of a second off the 200 metres record with a time of 2 min. 1.2 sec.

New Record By Tittes

East German swimmer Guenter Tittes set a world record for the 100-meter breast stroke at Berlin, on 5th July, 1961, clocking 1 min. 10.1 secs. Tittes's time knocked seven-tenth of a second off the official world record held by Russia's Minashkin.

Women's High Jump Record

Yolanda Balas, of Rumania, bettered her own women's world high jump record at an international athletics meeting at Budapest on July 8.

She cleared 1.90 metres (6 feet 2½ inches). Her best previous performance was 1.88 metres (6 feet 2 inches).

SPORTS INFORMATION**Development of Sports and Games in India**

Several far-reaching recommendations have been made in a Report recently submitted to the Union Ministry of Education by two members of the All India Council of Sports. The Report says that physical education should be considered an essential part of general education in schools and colleges and to achieve this, all schools and colleges including professional institutions should have properly-organised Departments of Physical Education. The Report suggests that a certain minimum standard of physical fitness and efficiency should be laid down for recruitment to services over and above the routine medical examination. The Report envisages the emergence, in course of time, of an All India Council of Sports, State Councils of Sports, District and Town Councils of Sports and Sports and Recreational Clubs.

Twenty Games in Tokyo Olympics

There will be 20 sports, including judo and volleyball, in the 1964 Olympic Games in Tokyo, the International Olympic Committee's congress decided at Athens on June 21. The sports are:

Boxing, basketball, football, cycling, hockey, athletics, canoeing, modern pentathlon, judo, rowing, wrestling, weightlifting, shooting, fencing, swimming and diving, water-polo, yachting, equestrian, gymnastics and volleyball.

There were 18 sports in the Rome Olympics last year. The additional ones in Tokyo are judo and volleyball.

G. D. Sondhi Elected

Mr. G. D. Sondhi, of India, was elected on June 21 for five years to the executive

committee of the International Olympic Committee in place of Sir Arthur Porritt, of New Zealand, who retired by rotation.

Rajkumari is Chief of Governors' Board

The Union Government nominated Rajkumari Amrit Kaur on June 29 as chairman of the Board of Governors of the National Institute of Sports, Patiala, vice Mr. Prem Kirpal, who has since resigned.

Mukherjea Dead

The octogenarian Mr. J. C. Mukherjea, twice President of the Board of Control for Cricket in India, a former president of the Cricket Association of Bengal and the Calcutta South Club, died of heart attack in Calcutta on June 19.

MCC to Play 15 Matches in India

An itinerary of 15 matches including five Tests, during the MCC tour of India in the winter was announced in Bangalore on June 21 by Mr. M. Chinnaswamy, honorary secretary of the Board of Control for Cricket in India.

Tom Pearce, 25-year-old former Essex captain, will manage the MCC team to tour India, Pakistan and Ceylon this winter.

The team expected to leave England on October 8 and return late in February, will play eight Tests, three in Pakistan and five in India.

Mr. Chinnaswamy said the MCC team would first visit Pakistan and after completing part of its Pakistan tour would arrive at Poona by plane and start its first three-day match against the Combined Universities XI on Oct. 29.

Except at Jaipur where the touring team would play a match against Rajasthan XI on a matting wicket, all the other 14 fixtures would be played on turf. Besides the five Tests, the MCC will play five zonal matches, one against the President's XI, one against the Services, against Bombay, the Ranji Trophy champions, another against Combined Universities and the fifth against Rajasthan.

For the first time a touring team will play a match at Cuttack. The fixture would be against East Zone.

By the time the MCC arrive in India, the Nawab of Pataudi and Abbas Ali Baig would be in India and would be available for selection for the Tests.

The following are the dates of the five Tests:

First Test at Bombay on Nov. 11, 12, 14, 15 and 16; Second Test at Kanpur on Dec. 1, 2, 3, 5 and 6; Third Test at Delhi on Dec. 13, 14, 16, 17 and 18; Fourth Test at Calcutta on Dec. 30, 31, Jan. 1, 3 and 4, 1962; Fifth and final Test at Madras on Jan. 10, 11, 13, 14 and 15.

New Definition of Amateur Athlete

The International Olympic Committee's Special Commission on Amateurism rewrote Article 26 of the Olympic code, defining the status of the amateur athlete on June 18 in Athens.

It was decided that the amateur athlete:

(1) Would have to show that he had a legitimate, non-sporting occupation which permitted him to earn his living.

(2) Would have to pledge that he had not received any remuneration at any sporting competition whatever.

(3) Would have to agree in advance to abide by the interpretative rules soon to be formulated.

The Commission will submit the new text of Article 26 to the I.O.C. for approval and publication. At the same time, it will submit the main points it wants included in the interpretative rules.

The points concern:

(1) The question of lost wages. Can an athlete be reimbursed for the wages he loses while competing?

(2) Can a professional in one sport be an amateur in another?

(3) The question of athletic scholarships.

(4) Gifts.

(5) Athletic monitors.

Most Ancient Stadium In The World

The most ancient stadium in the world—the 27-centuries-old stadium of Olympia—was handed over to the Greek authorities on June 22 by German archaeologists who uncovered and restored it.

The site of the stadium was first excavated by a German archaeologist in 1875 and the German Archaeological Institute in Athens carried on the work in 1937.

After World War II excavation and restoration work was resumed in 1957 under the leadership of Dr. Emil Kunze. The cost of about £100,000 sterling was contributed by German athletic and Olympic organisations.

Cricket 125 Years Ago

Members of the Tring Cricket Club will put the clock back 125 years on July 28 and July 29.

Games were played in those days soon after dawn had broken.

Players would awaken team-mates by throwing peas at their bed-room windows.

Present-day members wearing the costumes of the time will begin a 4 a.m. cricket match after an all-night dance.

Runs will be recorded by cutting notches in an ash staff.

Early club rules laid down 7 p.m. practice for members each Monday and Wednesday, with a penny fine for those not present and six-penny fines for those "refusing to comply with verbal orders."

Another was that "any member swearing, quarrelling or using coarse or indecent language at any meeting of the club, or during a game shall forfeit sixpence for every such offence."

The club was founded on Aug. 11, 1836.

Five Successive Sixes!

Cricket's hall of fame and a special column in *Wisden* contain the names of those who have hit 30 runs or more off a single over. The newest recruit to these two niches for immortals is Denis Lindsay, the 21-year-old Springbok who played for South African Fezela against Essex recently. Lindsay clouted the country's leg-spinner Bill Greensmith for five successive sixes. The first ball he received he played defensively. He then lofted the next two over the stand. The fourth and fifth balls he sent over the sight-screen and the last ball over the stand.

Thirty-plus-runs-an-over batsmen include Welland, the former Somerset all-rounder, who made 31, C. Smart, of Gloucester, who scored 32, and E. Alletson, of Nottinghamshire, who tops the list with 34. The over Alletson received included two no-balls.

Lindsay scored an unbeaten 83 in this match. His two previous innings yielded a "duck" each time.

Memorial To Barracker

Australian cricket enthusiasts are planning a memorial to a world-famous barracker. Known throughout the cricketing

(Continued on page 769)

Appointments, Awards etc.

APPOINTMENTS

Mr. Bijayananda Patnaik was unanimously elected leader of the 82-member Congress Party in the new Orissa Assembly on June 16.

Mr. William J. Handley was appointed on June 23 to replace Mr. W.K. Bunce as Counsellor for Public Affairs and Director of the USIS in India. He will take over in September next.

Dr. Signart E. Klund, a Swedish atomic expert, was elected the Director of International Atomic Agency on June 23. He will succeed Mr. Sterling Code of U.S.A. in December next.

Mrs. Raksha Saran was appointed Chairman of the National Council for Women's Education in place of Mrs. Durgabhai Deshmukh, on June 26.

Maj.-Gen. Tara Singh Bal, Indian Ambassador to Argentina, was appointed concurrently as Ambassador of India to Paraguay on June 26, with residence in Buenos Aires.

Mr. D. C. Pawate, Vice-Chancellor of the Karnatak University, was nominated on June 28 by the Union Government a member of the U.G.C.

Mahamahopadyaya D. V. Potdar was elected Vice-Chancellor of the Poona University for a term of three years on June 30.

Dr. J. George Harrar was elected President of the Rockefeller Foundation on June 30.

Mr. K. P. Mathrani took over on July 1 as Chairman of the Industrial Finance Corporation in succession to Mr. K. R. K. Menon.

Mr. Avtar Singh, Counsellor in the Indian Embassy in Bonn, was named on July 4 to succeed Mr. Samarendranath Sen, Chairman of the International Control Commission for Laos, when the latter returns to Canberra as India's High Commissioner in Australia.

The Government of India appointed on July 5 **Prof. A. R. Wadia**, M.P., Director of Tata Institute of Social Sciences, as a member of the UGC in place of Dr. K. S. Krishnan.

Aden Abdullah Osman was elected President of Somali Republic on July 7 for a period of six years.

Mr. George Ferdinand Duckwitz was

appointed ambassador of the Federal Republic of Germany to India on July 7.

Mr. R. P. Tamta replaced Mr. R. P. Sinha as Chairman of the Railway Service Commission, Allahabad on July 7.

The Ambassador-designate of Finland, **Mr. Veli Helenius**, presented his credentials to the President, Dr. Rajendra Prasad, in New Delhi on July 11.

Mr. V. R. Nedumchezun was elected chairman of the general council of the Dravida Munnetra Kazhagam on July 12.

Dr. Armando Florex Ibarra, Counsellor in the Foreign Service of Cuba, took charge of this country's Embassy in New Delhi as Charge d' Affaires on July 13 following the dismissal of Ambassador E. Soler Alonso.

Dr. S. Bhagwantam, Director of Indian Institute of Science, Bangalore, has been appointed honorary Scientific Adviser to the Defence Minister in succession to Dr. D. S. Kothari who has become Chairman of the UGC.

The Finnish President, Mr. Urho Kekkonen, appointed on July 14, a new Cabinet headed by the Governor of Lapland, **Martti Miettunen**, succeeding Mr. Vieno Johannes Sukselainen who resigned on June 29.

AWARDS

Sir Anthony Eden, former British Prime Minister was made the Earl of Avon on July 5, by Queen Elizabeth II.

Dr. V. S. Huzurbazar, Professor of Mathematics in the University of Poona, has been awarded the "Adams Prime", the greatest honour that could be conferred by the Cambridge University (stronghold of Mathematics) for research in Mathematics. The subject of research was the "theory of probability" and Dr. Huzurbazar would get a cash prize worth £432.

Chandigarh was awarded on July 10 the 1961 **Grand Prix of Architecture** by the Association for Architectural Studies for its architectural design. Chandigarh was designed by the famous French architect, M. le Corbusier.

A stately, tall Miss Germany, **Marlene Schmidt**, was chosen as Miss Universe in Miami Beach on July 15.

VISITORS

Dr. Eric Williams, Prime Minister of Trinidad, arrived in New Delhi on June 25 on a week's tour of India.

(Continued on page 776)

NEWS Diary

JUNE

14. An attempt by four generals to overthrow the Communist regime in Bulgaria failed.

Israel's Knesseth (Parliament) was dissolved after only 19 months instead of the normal 45, paving the way for a general election on August 15.

15. The U.S. rejected Khrushchev's proposal to merge the nuclear test ban issue with the broader problem of general disarmament.

Reporting on his Vienna Summit talks with President Kennedy, the Soviet Premier called on all States who had fought against Nazi Germany to take part in a peace conference to sign German Peace Treaty. Any attempt to change the German borders would mean nuclear war, he said.

16. President Kennedy proposed for the revival of the three-nation U.N. Palestine Conciliation Commission with a view to seeking a solution of the problem of Arab refugees.

17. America put the 2,100 lb. Discoverer XXV into orbit. The satellite is circling the earth every 91 minutes.

President Kennedy accused the Soviet Union of blocking an agreement on a nuclear test ban and warned that national security would force him to order resumption of U.S. weapon testing.

Mr. A.K. Gopalan, Deputy Leader of the Communist group in the Lok Sabha, terminated his 12-day-old fast begun in protest against the treatment meted out by the State Government to Amravati settlers evicted from Iddiki reservoir area.

The state of emergency was extended for another month in Ceylon.

According to an announcement in Rawalpindi today the five-man Austrian expedition, led by Mr. Erich Wasschalk, conquered the 24,000-foot-high Mount Ghent in the Karakoram range.

18. According to a message received in New Delhi from Capt. N. Kumar leader of the Nilkantha expedition, Mr. O.P. Sharma and two sherpas climbed the hitherto un-

climbed 21,640 -foot-high Nilkantha peak on June 13.

The Arab League countries agreed to form a unified military high command headed by the U.A.R.

19. The police opened fire in Hailakandi (Cachar district of Assam) to quell disturbances following clashes between the supporters of the current language movement and those opposing it.

20. The Katanga Government announced that it was 'no longer a part of the former Republic of the Congo'.

21. Premier Khrushchev warned that if the U.S. resumed nuclear tests the Soviet Union would do the same.

Deputies of the Left, Right and Neutralist Laotian princes reached agreement on the integration of the opposing forces in Laos, a transition period under the present regime and the policies of a coalition government.

A 7 p.m.-to-5 a.m. curfew was clamped on Silcher town, headquarters of Cachar district.

22. All the three Laotian Princes agreed in Zurich to form a "Government of National Union" in Laos.

President Tshombe of Katanga was released from imprisonment by the Central Congolese Government.

23. A seven-member Congress Ministry, headed by Mr. Bijoyananda Patnaik assumed office in Orissa. It thus brought an end to the President's rule in the State imposed on February 25.

The resolutions committee of the 45th Inter-National Labour Conference voted that South Africa should withdraw from the world labour body.

The Governor of Assam declared the whole of Cachar district a disturbed area for three months.

An agreement for the avoidance of double taxation of income between India and Finland was signed in New Delhi.

An Indo-Greek cultural agreement was signed in Athens.

The Antarctic Treaty, signed by 12 nations, in Washington on December 1, 1959 which demilitarizes the Antarctic continent and sets it aside for peaceful purposes, came into effect from today.

24. The venue of the neutral nations summit conference, scheduled to open on September 1, was shifted from Bled to Belgrade, the Yugoslav capital.

A successful demonstration flight of the Hindustan Fighter, HF-24, India's and Asia's first truly supersonic aircraft, was performed by Wing Commander Suranjan Das in Bangalore. (Only five other countries—Russia, America, Britain, France, Sweden—of the world manufacture supersonic aircrafts.)

The Strasbourg conference of parliamentarians of the European Economic Community from 16 of their former African dependencies concluded in Strasbourg following agreement on a wide series of problems.

25. It was announced in Moscow that the Soviet engineers have designed the world's largest three-phase, three-electrode electric furnace, capable of producing about 250,000 tons of top quality steel a year. The furnace is to be put into operation in 1965.

Premier Kassem of Iraq declared at Baghdad that the oil-rich Persian Gulf Island of Kuwait, which was to be declared independent on June 26, was part of Iraqi territory.

26. An Army revolt in Venezuela was crushed by the Government of President Betancourt after 5 hours of its uprising.

China rejected Franco-American draft proposals for a neutral Laos and warned that any attempt to impose an international trusteeship would rekindle "the flames of war" in the Indo-China Kingdom.

27. A state of emergency was proclaimed in Kuwait.

The Royal Laotian Government of Premier Prince Boun Oum ended its boycott of the 14-nation Laos Conference.

28. The Kerala Assembly rejected a no-confidence motion against the Thanu Pillai Ministry by 86 to 30 votes.

The U.S. recognised Kuwait as a Sovereign State.

Cuba officially recognised the Algerian Provisional Government (GPRA).

The U.S. orbited three satellites simultaneously from a single carrier rocket.

Premier Bhajat Talhouni's Cabinet resigned and the Premier formed a new 11-man Government at the request of King Hussein of Jordan.

29. Mr. Mohammed Daud, Prime Minister of Afghanistan, called for a plebiscite in Pakhtoonistan, the border area of Pakistan claimed by Afghanistan.

A communist plot was uncovered in Thailand's north-east region bordering Laos.

30. Prime Minister Nehru declared in New Delhi that India was not prepared to discuss the Kashmir question with Pakistan unless that country withdrew its army from the occupied territory.

Kuwait applied for membership to the U.N.

JULY

1. British and Saudi Arabian troops and planes landed in Kuwait in response to a call from Kuwait for protection against threatened annexation of Kuwait by neighbouring Iraq.

2. The foundation stone of a wind tunnel centre of India's National Aeronautical Laboratory was laid in Bangalore.

Nagaland's Interim body recommended in a resolution the formation of a commission to settle the boundary question between Assam and Nagaland on a permanent basis.

3. According to a message received in New Delhi from the leader of the Nanda Devi Expedition, Mr. Gurdial Singh, the 22,320-foot-high summit of Maiktoli in the Garhwal Himalayas was reached by a party of nine Indian climbers on June 21.

Maj. Gen. Jung Hui Park, considered the prime mover of the South Korea's coup which ousted Dr. John Chang's government, on May 16, took over as Chairman of the Junta from General Do Yung Chang who resigned this post as well as the premiership. Lt.-Gen. Tiger Yo Chang Song became Premier while remaining Defence Minister.

4. The Government of Sierra Leone announced ban on all trade and commerce with South Africa in protest against its "abominable apartheid policies".

5. According to a message received in New Delhi from the expedition leader

Gurdial Singh, the 23,360-foot Trisul peak in the Garhwal Himalayas was climbed by some members of the Indian expedition to Nanda Devi.

Israel joined the club of space-rocket nations—Britain, the U.S., Russia, France, Italy and Japan—when it launched its first space rocket into the ionosphere 50 miles up over the mediterranean coast.

Nyasaland's new constitution, giving Africans a clear majority in the Legislature for the first time, came into force.

6. The U.S. successfully placed in orbit a new artificial satellite, Discoverer XXVI, from the Vandenberg Air Force Base (California).

7. The U.N. Trusteeship Council recommended unanimously that the New Zealand trust territory of Western Samoa become independent next January 1. It would be the first of the tropical island groups in the South Pacific to achieve independence and the first Polynesian State.

8. The Government of India recognised Yuvraj Karan Singh as the successor to the late Maharaja Hari Singh of Kashmir with effect from April 26, 1961. But the Yuvraj said that he would not like to use the title so far as he was the Chief of the Jammu and Kashmir State.

Premier Khrushchev announced in Moscow that Soviet Union had suspended planned reduction in its armed forces in view of the world situation.

9. It was announced in Seoul that the former military ruler of South Korea, Lt.-Gen. Chang Do Yung, and 43 other officers were arrested on July 3 for plotting a counter-revolution and the assassination of the country's present leader Maj-Gen. Pak Chang Hui.

11. Gen. Salan and seven other generals and colonels were sentenced to death in absentia for their part in the April revolt in Algeria.

China and North Korea signed a mutual assistance treaty in Peking pledging full military support to each other in case either nation is attacked.

The UAR nationalised the country's biggest privately owned shipping concern the "Khedival Mail Line".

12. Midas III, a missile-alarm satellite, roared from its launching pad at Point Arguello (California) after a series of delays.

13. America agreed to deliver F-104 supersonic fighter planes to Pakistan.

Former South Korean Prime Minister John M. Chang and three of his Cabinet Ministers were charged with receiving embezzled public funds as bribery while they were in office in January this year.

14. Maj-Gen. Abdul Karim Kassem, the Iraqi Prime Minister, said in Baghdad that Iraq would declare a "war of attrition" on the British if they did not "end their aggression" in Kuwait.

Former Dominican Defence Minister Jose Rene Roman was sentenced to 30 years in prison for complicity in the assassination of Gen. Trujillo.

Appointments, Awards etc.

(Continued from page 773)

Dr. M. I. Okpara, Prime Minister of Eastern Nigeria, arrived in New Delhi on July 3 on a three-week tour of the country.

Mr. Peter Thorneycroft, British Minister of Civil Aviation, arrived in New Delhi on July 12 for a four-day visit.

OBITUARY

Eddie Polo (86), the star of silent film serials, collapsed and died in Hollywood on June 14.

Mr. Khasa Subba Rao (65), a veteran journalist and editor of the noted political weekly, "Swarajya", died in Madras on June 16.

John McCurdy (74), the first man in the British Empire to fly a plane, died in Montreal on June 26.

Sardar Baldev Singh, India's former Defence Minister, died in New Delhi on June 29.

Dr. Lee De Forest (87), inventor of the three-element vacuum tube, and known as "father of the radio" died in Hollywood on July 1.

Ernest Hemingway (62), one of the greatest American novelists and Nobel-laureate, accidentally killed himself at Ketchum on July 2 while cleaning a gun.

Mr. Purshottamdas Thakurdas, India's "cotton king", died in Bombay after protracted illness on July 4.

Novelist Mazo De La Roche, known for her Jalna series, died in Toronto on July 12.

The Maharaja of Gwalior, His Highness Sir Jiwajirao Madhavrao Scindia, (45) died in Bombay on July 16.

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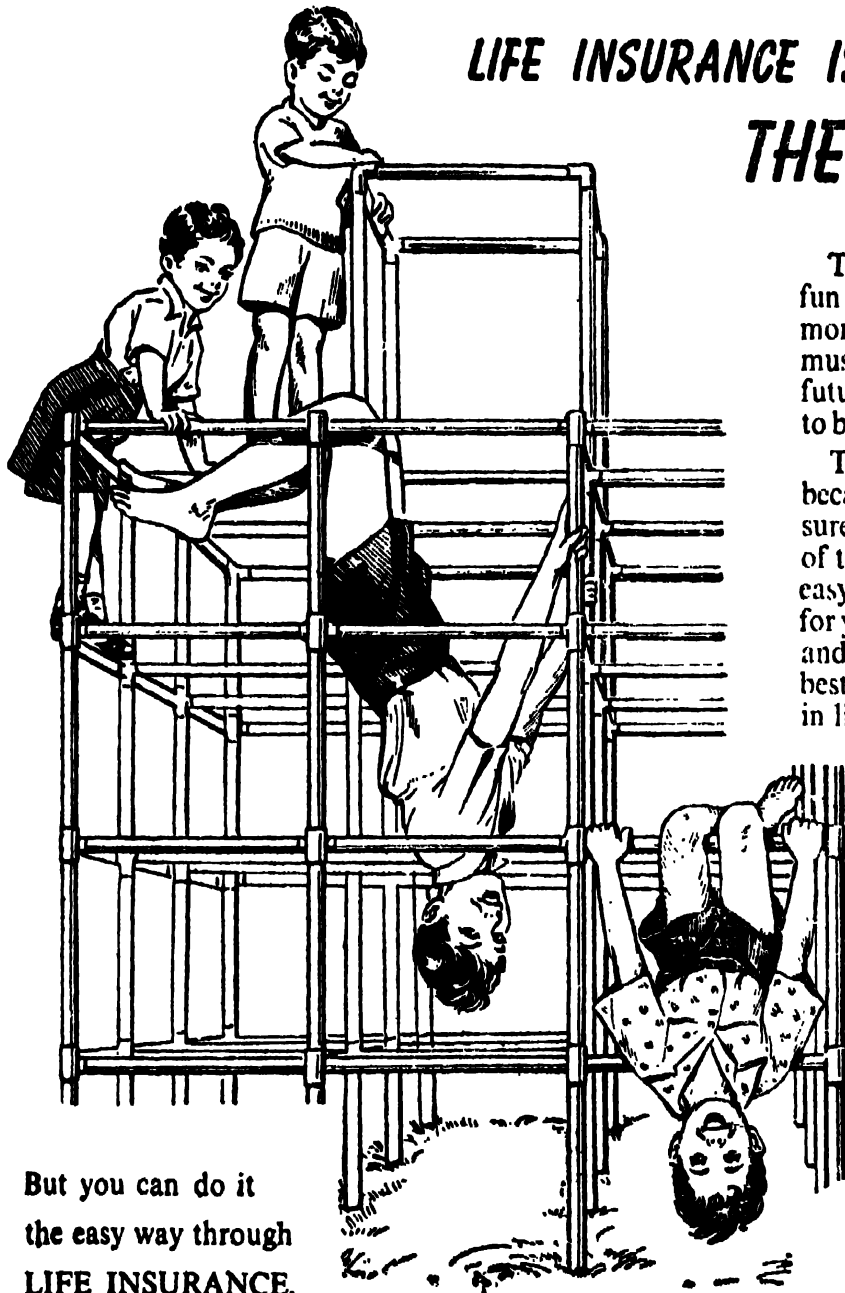
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EDITORIAL

PAKISTAN'S HATE-CAMPAIGN AGAINST INDIA

For the last few months Pakistani press and rulers, led by President Mohammad Ayub Khan, have been carrying on a vigorous campaign of calumny against India, its leaders and their economic and political policies. India-baiting is not a new pastime with Pakistani rulers as they have been indulging in it for the last fourteen years. Whenever there has been a sign or an indication of internal unrest, the Pakistani rulers started a hate-India campaign to divert the minds of the people. This sporadic slanging of India has been meant solely for home consumption in the past and it bore no fruits in the international field. But the recent spurt of malicious propaganda against India was started to impress the United States with a view to get more military and economic aid from her. History tells us that unpopular dictators and frustrated autocratic rulers have been using bluff and bluster as a weapon to bolster up their own prestige at home and to bamboozle people abroad. Hitler and Mussolini used this technique successfully to conquer empires. Now the tin-pot dictator of Pakistan, self-promoted Field Marshal, Mohammad Ayub Khan has decided to follow the foot-steps of Hitler and Mussolini and has unleashed a wave of hate-everything-India campaign to boost his sagging prestige at home, to intimidate his benefactors with a view to get more material aid and moral support, and to cower down India to come to terms with him on the question of Kashmir.

It is an open fact that Pakistan has made very little economic or industrial progress in the last fourteen years. All her

economy is dependent on the financial aid she gets from Western countries, mostly from United States. Before October 1958, when by a military coup Mohammad Ayub Khan became the President, the Pakistani politicians had no time or intention to devote to the welfare of the State or the people. They were busy wrangling among themselves to keep in power and stick to their official posts. The people welcomed the military regime and hoped that Mohammad Ayub Khan would bring some kind of political stability and usher in a millennium—the aim with which Pakistan was created. But all the hopes of the people have been belied. Discontent is simmering among the people against the continued military regime and the suppression of all rights and freedoms of the people. There have been demonstrations by the students and other youth bodies against the martial law rule but the freedom movement has been ruthlessly suppressed. The hope and aspiration of the tribal people to get an independent Pukhtoonistan have been suppressed by bombing the tribal area and putting the brave pathans behind the bars. An underground wave of discontent and restlessness is rampant among the people because of some social reforms (such as change in marriage and divorce laws) against the Islamic tenets. The Mullahs (Islamic priests) and religious bodies are highly indignant at these reforms. Pamphlets and cyclostyled hardbills decrying the deeds of the military regime have been secretly distributed among the people. Continued suppression of civil liberties and political acti-

vity in the country has made the people impatient and there were indications recently that some kind of action against the military regime was being contemplated by the people and the politicians. To add to the woes of the dictator of Pakistan came the news from Washington that United States was contemplating to extend military aid to non-committed countries. Mohammad Ayub Khan thought that India would take advantage of this offer and make herself militarily stronger than Pakistan. India's continued economic and industrial progress had already piqued Ayub Khan. He became frustrated and thought himself let down by his military ally, the U.S. This was a ripe time for some kind of action to suppress the growing ferment in his own country, to bolster up his waning prestige in the U.S., and to start a vendetta against the big and prosperous neighbour—India. His vitriolic abuse against India, his threats and intimidations before his visit to Washington, and the subsequent happenings should be viewed in the above stated background.

Whenever the rulers of Pakistan have any internal trouble, they use the problem of Kashmir as a handy weapon to alleviate it. They are unwilling to settle this dispute amicably for their own ulterior motives. They have been keeping illegally occupied about one-third of Kashmir and refuse to vacate it so that the issue may be kept alive and made use of whenever necessary. When President Ayub Khan came into power, he gave an impression in his utterances that he would try his best to stabilize friendly relations with India. He went as far as to say that Kashmir need not stand in the way of Pakistan and India working in close harmony in other spheres. He has catapulted from his former stand and now he says that there can not be any friendship or peace between India and Pakistan until the Kashmir problem is solved. After a lull of nearly four years, Pakistan is again kicking up the Kashmir issue and threatening to take it to the U.N. once again.

In the welcome address to Mr. Lyndon B. Johnson, U.S. Vice-President, at Karachi on May 20, 1961, a reference was made to the "explosive situation" in Kashmir. It said: "The view has gained currency that Kashmir is a local problem which is for the local parties to sort out between themselves. We think that this is a wrong and dangerous view". It urged the U.S. "to bring all her wisdom and all her resources to bear

upon it for a just and speedy solution of the Kashmir problem". Almost the entire press in Pakistan, on May 20, published editorials—like a command performance—urging the United States to take a firm stand on the Kashmir issue and not regard it as merely a "local dispute between Pakistan and India". Mr. Lyndon Johnson remained non-committed on the Kashmir issue and merely reiterated the American stand that India and Pakistan should themselves amicably solve the problem. The evasive answers of Mr. Johnson greatly disappointed the official and non-official circles in Pakistan. The Karachi daily, "Dawn", often regarded as the official mouth-piece, wrote a strong editorial on May 23 expressing resentment at the non-inclusion in the Joint Statement on the Johnson-Ayub Khan talks of even the bare fact that Mr. Johnson had taken part in a discussion on Kashmir.

In an interview in Karachi on July 6, Mohammad Ayub Khan said that U.S.A. was in a "strong position to exert its influence on India towards a settlement of Kashmir issue—if for nothing else atleast to protect its investments in Pakistan and India. But apparently, U.S.A. does not realise the gravity of the situation". He pointed out that as long as the Kashmir problem was unsolved, "our two armies will be facing each other instead of defending the sub-continent". He said he had "tried very hard" to settle the problem with the Indian Prime Minister, Mr. Nehru, but "I do not think that Mr. Nehru is convinced of the necessity of a settlement except on his own terms".

Lt-Gen. K. M. Sheikh, Pakistan's Minister for Rehabilitation, said in an interview in New Delhi on July 8 that the "pursuit of Indo-Pakistan amity will be a wild goose chase if the issue of Kashmir remains unsolved".

A Joint Communique issued on July 13 after the Ayub-Kennedy talks stated only this much about Kashmir issue: "President Ayub Khan reviewed his Government's position on the Kashmir issue and stressed the great importance attached to this issue by the people of Pakistan. He stated that the current developments in South-East Asia have made an early solution of this issue imperative. President Kennedy affirmed the desire of the U.S. to see a satisfactory solution of the Kashmir issue and expressed the hope that progress toward a settlement would be possible at an early date".

This vague reference to Kashmir dispute did not satisfy the Pakistani rulers. They raised the pitch of propaganda over Kashmir and even threatened to send "volunteers" to Indian side of the cease-fire line. Mr. Z. A. Bhutto, Pakistan's acting Minister for Foreign Affairs, said in Karachi on July 15: "Let it be known beyond all doubt that Kashmir is to Pakistan what Berlin is to the West and that without a fair and proper settlement of this issue the people of Pakistan will not consider the crusade for Pakistan as complete".

At a press interview in Washington on July 16, President Ayub Khan said: "Mr. Kennedy had agreed to the settling of the Indo-Pakistan dispute over Kashmir—raise this point with Mr. Nehru and impress upon him the necessity of the resolution of this problem, because unless Kashmir is resolved the present situation which is that the Indian Army and the Pakistani Army are facing each other, will stay, and if that stays all sorts of dangerous consequences can follow." He said that Kashmir belonged to the people of Kashmir. "If the people of Kashmir said they did not want to be with Pakistan, then Pakistan had no reason to urge them to be with Pakistan. What Pakistan wanted was their freedom".

The President of Pakistan in raising the bogey of the Kashmir problem has conveniently connived at the fact that the people of Kashmir have already given their verdict not to be with Pakistan. Kashmir had acceded to India in October 1947. The National Conference and the Constituent Assembly of Kashmir have ratified the accession. Now no purpose will be served by putting pressure on India to revive the Kashmir problem. The best and easiest solution is that Pakistan should vacate the portion of Kashmir occupied by her. No threats of war by Pakistan or raising the issue in the U.N. would compel India to budge from the stand she had already explained a number of times.

At a news conference in New Delhi on June 30, the Indian Prime Minister, Mr. Jawaharlal Nehru, said that India was not prepared to discuss the Kashmir question with Pakistan unless that country withdrew its army from the occupied territory. He said that Pakistan had wrongly invaded Kashmir. "Pakistan has not withdrawn its forces from the occupied territory which is the very first thing that the U.N. Security

Council laid down eight years ago. It is shameful and disgraceful for them to talk of a plebiscite when they have not withdrawn their army from the territory."

Mr. Nehru declared in Srinagar on July 19 that India would not tolerate any attack on Kashmir and would counter aggression with all her might. He said that the U.N. resolution in which Pakistan harped was dead for its very basis had changed and Pakistan had failed to fulfil its various conditions. He declared that there was no Kashmir issue except that Pakistan had invaded Indian territory in Kashmir and must clear out. He added that neither Pakistan nor any of her friends could force India to reopen the issue of Kashmir's accession. Mr. Nehru said he was exasperated by the talk about plebiscite. There was no question of any plebiscite in Kashmir, now or later. He said India could not be expected to keep on waiting for centuries for Pakistan to comply with the conditions for a plebiscite. The agreement had lapsed because Pakistan had failed to fulfil the conditions.

Another cause of Pakistan's bitterness against India is the aid she is getting from the U.S.A. In an interview to the special correspondent of the 'The Times' (London) in Murree on July 5, 1961, President Ayub Khan criticised the American move to liberalise the provisions of the Mutual Security Act to facilitate the supply of American arms to uncommitted countries like India. He complained that the new American policy would throw open the floodgates of U.S. military aid to India and aggravate the atmosphere of suspicion and hostility in the subcontinent. President Ayub Khan said there was a deep contradiction in the New American policy of granting economic and military aid to friends and neutrals alike. He thought it was both unfair and illogical.

The fact is that the American economic aid to Pakistan in the past 10 years on a per capita basis has totalled 15 dollars as against 6.2 dollars to India in the same decade. Excluding military aid, the total economic and technical assistance in grants and loans from the U.S.A. to Pakistan on June 30, 1961, amounted to about 1.15 billion dollars. India has not received any military aid from the U.S.A. or any other country. She does not intend in future to ask for any military aid from any side. The

false propaganda against India by Pakistan of having purchased American weapons "at cut rates" is quite baseless. The only purpose of denigrating India was to impress America to enhance military aid to Pakistan. The Pakistan President told American audiences "that India's Prime Minister is a cowardly leader surrounded by sinister men whose friendship cannot be relied upon, while Pakistan has been a faithfully which has invited Russia's retaliation by committing itself to a military alliance with the U.S.A." The Pakistani President said that he was dismayed and disappointed at the "unsound" American policies in Asia and threatened to quit membership of SEATO and CENTO.

President Ayub Khan said in Beirut on July 7: "We are America's friends and allies and thus do not like to see our friends doing something which hurts us. We are concerned at recent events which have hurt the feelings of Pakistani people, namely, increased aid to India".

In an interview to the special correspondent of the APA, the Pakistani President said that the increased American aid to India posed a threat to Pakistan and damaged relations between America and Pakistan. He was more critical of what he characterised as the American policy of placing greater store by Mr. Nehru in the struggle against Communism in Asia. He added that Mr. Nehru would be a greater disappointment than even Chiang Kai-Shek or Syngman Rhee. He gave his personal assessment of the Indian Prime Minister in support of his contention.

In a recorded television interview in London, President Ayub said that aid to India was promoting instability in the region. He added that if India made a success of the economic plans and became strong, her neighbours would feel very insecure. Among the countries he named were Sikkim, Bhutan, Nepal, Burma, Malaya, Ceylon and Pakistan. The reason for their fear was India's aggressiveness and their unfriendly relations with it, he added. The result would be that all would turn to China for protection. Mr. Ayub Khan tried to prove that the U.S. by helping India was in fact helping the cause of Communism.

The reward for calumny against India was given by the U.S. in agreeing to step up aid to Pakistan. America has already

delivered 10 F-104 supersonic fighter planes to Pakistan. India has naturally protested to the U.S. against the increased military aid to Pakistan. Though India has been assured by the U.S. that the military weapons are not intended to be used against India, there is no binding on Pakistan to make an aggressive move against India with the help of these weapons.

Speaking in the Foreign Affairs debate in the Lok Sabha on August 16, 1961, Mr. Nehru said: "I was surprised and grieved at some of Mr. Ayub's statements, the whole context of some of these statements, where it was said and the way in which India was subjected to his attacks in foreign countries. It is not normally done, more especially by heads of States, and that is why I was greatly surprised. It showed a mental approach which I think was deplorable. The mental approach was just hatred for India, dislike that India should make any progress and generally, what shall I say, a basic policy that did not think so much positively of Pakistan but rather negatively".

Mr. Nehru questioned President Ayub's statement that if the Kashmir issue was settled all would be well with India and Pakistan and said: "I am absolutely convinced, convinced more than ever, no matter what happens to Kashmir, and I know what will happen to Kashmir, this question of India and Pakistan is not dependent on Kashmir. Even if the Kashmir question is removed from the scene today, the Pakistan authorities, I do not say the people of Pakistan, would still fiercely attack India, because their whole policy is based on anti-India, dislike of India, envy of India and that is their basic policy".

Drawing a contrast between the policies in India and Pakistan, Mr. Nehru said: "Here in India, we do not refer to Pakistan in every issue while in Pakistan the major subject of debate is India, hatred for India. It is extraordinary they have developed a complex. They think their progress consists somehow in denigrating India."

The whole origin of Pakistan was not based on any positive concept but on the concept of hatred and anti-India feeling.

Mr. Nehru said that ultimately when Pakistan was formed communalism became the dominant feature of Pakistan and there was no positive approach.

Need to Develop National Consciousness

By Dr. K. L. SHRIMALI
Union Minister of Education

The problem of national integration has recently assumed great importance and I have every hope that the Committee of Emotional Integration recently appointed by A.I.C.C. would suggest suitable measures which may enable our educational system to function more effectively as an instrument for bringing about greater social cohesion and emotional integration. Without being chauvinistic we must make the youth of the country conscious of the fact that our borders are not invulnerable and they must stand united and be prepared to protect them against aggression. For the preservation of freedom against external aggression, for the solution of social and economic problems and in the fight against centrifugal forces we must build up a strong and healthy sense of national unity.

During the period of struggle for independence, a sense of national unity was created among our people. The urge for freedom provided the unifying bond and we learnt to subordinate narrow regional interests and group loyalties to the ideal of Swaraj and to some extent we were successful. Partition was the result to some extent of our failure to bring about greater cohesion among the two major communities of undivided India. This should have a lesson for us.

The process of national integration must continue and be strengthened if we are to preserve and enrich our hard-won freedom. We need as much today that overwhelming sense of purpose to meet the new challenge to our freedom as we did in the past to win it. The impulse of freedom should not be allowed to weaken or its brilliance to fade in any way.

There is still another reason why we should make a deliberate effort to foster the feeling of nationalism. We have already launched a big programme of social and economic reconstruction. We shall achieve success only to the extent that we are able to channelise the emotional urges underlying nationalism. It is the sentiment of nationalism which can unfold before our people the vision of the new society which is gradually taking shape and which would instil in them the sense of discipline that is necessary to achieve a great ideal, the capa-

city to work diligently, the readiness to make sacrifices in a great cause and the spirit of enterprise and cooperation. There is no motive more powerful than nationalism which can lift the masses out of ignorance, apathy and frustration. Let us not be apologetic about cultivating deliberately a strong sense of nationalism among our people.

In his latest book "Beyond the Welfare State", Gunnar Myrdal—one of the world's foremost economists has recognised that "the instigation of nationalistic feelings among backward peoples is a precondition for social and economic progress. If progress is the goal, to foster these emotions becomes a rational means for accomplishing it". Nationalism may be associated with reaction in those Western countries which have already attained a high level of national integration but in an underdeveloped country like ours where people are divided on account of social, economic, cultural and religious differences, the powerful stimulant of nationalism is needed to break down cultural isolation and to develop among the people a sense of common purpose.

In a country like ours which has accepted and allows a diversity of cultures and religions, it is all the more important to have some kind of unifying force. Linguistic and other group loyalties are deeply rooted in the soil and history of India. These narrow loyalties have a tendency to pull the people apart and widen the gulf which already separates them from each other. During the struggle for independence the communities forgot their linguistic and cultural differences and worked together under the inspiration of a common purpose.

After independence there is again a tendency among the communities to separate and to emphasise their cultural differences. This is a dangerous tendency and must be counteracted by giving a positive and idealistic content to our concept of nationalism. Cultural diversity is not cultural isolation. It is sustained and made possible by an underlying unity. Different cultural streams following their own course in different regions are the tributaries to the main river of Indian culture which has nourished this country for thousands of

years. If the streams were to go their own way they would lose themselves in the desert of isolation. On the other hand their intermingling and confluence has given us the precious heritage of Indian culture. Only the vision of one nation can carry it forward in an ever broadening stream.

Deliberate Effort Required

If we are convinced that in the present state of our development we must make deliberate effort to develop national consciousness among our people it is a legitimate demand that our educational system should be geared to fulfil this purpose. Educational policies and practices are determined largely by national needs and requirements and our greatest need today is the development of national consciousness among our youth. Schools must become the instruments for the realisation of national ideals. They must give to the youth a feeling of common interest and a sense of belonging to a worthy national community which had a great past and a present full of hopes and dreams merging into a glorious future.

Education must make the growing youth realise that they are indissolubly bound to the nation and its destiny, its tragedies and joys, its conflicts and settlements, its failures and achievements, its mistakes and wisdom and they should come to regard it with pride and with love and the impelling desire to serve it whole-heartedly.

This can be done only when teaching is animated with a spirit of nationalism. It is not only the study of history and social studies but also literature, music and art which can contribute to national awareness. All curriculum subjects can show the essential unity of the various elements in the nation and how they have contributed to the progress of the nation as a whole; all subjects can give the basis of national pride and can lead pupils to a feeling of personal responsibility that should express itself in efforts towards a still finer national development.

Key Position of Teachers

In this whole programme of developing national integration the teachers occupy the key position. It is not the subject matter or the method of teaching which is of so much importance as the spirit with which they approach the problem. They must

understand the possibilities of each subject and teach them in a way which would be conducive to the strengthening of national awareness. They must have a broad vision of the society and must be inspired with a spirit of dedication in order that they in their turn may be able to inculcate national feeling among their students. They must rise above narrow parochial loyalties and by their behaviour and example develop among the youth a spirit of tolerance and mutual appreciation, qualities which are of basic importance for the citizens of a pluralistic society like ours and without which emotional integration cannot be achieved.

In this hour of crisis teachers cannot remain passive spectators. They must fight against all these forces—ignorance, prejudice and fanaticism which create barriers among the people and separate one section of the community from the other. They must not remain content with giving mere factual information to their students but mould their minds so that they might become worthy citizens of a great country. The programme of teacher training should therefore occupy an important place in any programme of national integration.

The sentiment of national consciousness is a fruition of a series of experiences by which the individual is brought into conscious contacts with the full facts of his nationality. The National Flag and the National Song which are symbols of our past struggles and future promises, Independence Day Celebrations and other holiday youth camps—all these can be utilised to make the youth realise that they belong to a larger Unit. It should be one of the important functions of our schools to emphasise the fundamental unity of our culture. It should be the central point upon which the national consciousness should be focussed. The spiritual and cultural life of our people and our historic traditions and loyalties—all these elements which make the ethos and culture pattern of our people should form an integral part of national education. Our educational system must reflect the cultural values of our society so that the younger generation may take pride in our way of life.

Peaceful Force

The kind of nationalism which we wish to develop is not incompatible with the ideal of internationalism. We have no ill-

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Science fixes the meaning of a term, language fixes the word. The meaning is universal, the word is local or regional It is in this sense that there is a common or universal "Language of Science" in a multilingual world.

Scientific Terminology And Scientific Progress

By PROF. D. S. KOTHARI
Chairman, University Grants Commission

The shape of the modern world is being determined to an ever-increasing extent by science and its impact on man and things. Science has powerful, unifying and cultural influence because of the universality of the principles it seeks and discovers, and because its cultivation cuts across sectarian, national and ideological frontiers. It gives first place to **co-operation** and not competition, and its roots lie deep in man's highest capabilities and aspirations.

The basis of scientific progress has always been free discussion, exchange of knowledge and active communication between scientists. This is now largely carried through the medium of professional journals supplemented by national and international conferences. Currently, something like a million original scientific and technical papers and some fifty thousand (scientific and technical) books and about the same number of reports are published every year; and the two most widely used languages for communication of the results of research and exchange of scientific knowledge are English and Russian. German and French come next, but their importance is now less than what it was, say, twenty years ago. More than 50 per cent of the scientific literature is published in English. The eminent position which these languages occupy is but a reflection of the contribution to knowledge made by people speaking these languages.

Science and Language

The essential ingredient of scientific thinking and communication is the use of a precisely defined terminology, more or less special to each branch of science, and though the word describing it varies generally from one language to another, the content is precisely identical, by definition. (For example, velocity is "geschwindigkeit" in German, "vitesse" in French, "skorost" in Russian, and "sokudo" in Japanese). For a scientific term the meaning is completely conserved in passing from one language to another, no matter how different the two languages are, but the word standing for it

varies in general. Outside science, the meaning of a word is not sharply defined, but carries a "penumbra or cloud" around it which does not remain the same on translation.

International Terminology

An important but rather small part of scientific terminology consists of words that are the same in all or most of the important (European) languages. Briefly termed "international terminology," it includes the symbols of elements and their compounds, physical units and constants, symbols and signs for mathematical operations, and the binomial Latin names for plants and animals.

Technical words which describe physical concepts and properties of things (e.g. mass, force, power, thermodynamic assembly and group) can be classified into two broad categories:—

(a) words taken from "ordinary speech" and given a precise scientific meaning;

(b) words which seldom occur in "ordinary speech" but are specially imported or evolved for scientific purposes.

Examples of the first category are words like **work, cell, class and charge**, and examples of the second category are **isotope, isobar, gas, radio-activity and quantisation**.

Growth in India

In India the problem of scientific terminology in the regional languages is of outstanding current interest and importance. In dealing with this problem, it is necessary to consider separately the requirements of advanced study and research and those of school education and popularization of science.

In the first case the scientific terminology and the language of which it is a part, must provide access to the fast-accumulating new knowledge and serve as a channel for exchange of knowledge. For this English is the obvious choice. An adequate knowledge of this language and facility in its use must be an essential requirement

for the successful completion of the post-graduate course in science and for the degree course in professional subjects such as engineering and medicine. In fact, for some years to come this might with profit apply to the under-graduate course as well.

Also, it is most important in relation to our progress in science and technology that there should be a provision for the study of the Russian language in the Universities and the Professional Colleges.

It would be obviously unpractical to contemplate one scientific terminology for all the different regional languages in the country. A common terminology, scientific or otherwise, can be based on a common language only. For example, there is no common scientific terminology in the European languages.

At the under-graduate stage use should be made of the terminology in the regional language and also the scientific terminology in English. In fact this "double terminology" would be necessary for the next few years as at the college stage of education, text books in the regional languages as well as in English would have to be used. The use of the two terminologies in parallel, as it were, would help enrich indirectly the local languages.

The immense practical advantage of acquiring knowledge particularly at the school stage in one's own language is one of the main reasons for evolving separate scientific terminologies in the main regional languages. It is, in general, not practical to implant words describing "concepts" from one language into an essentially-different language. One word leads to several associated words and to import the whole lot would almost amount to replacing one language by another. For example the word "to conduct" gives the frequently used technical terms, such as "conduction", "conductor", "super-conductor", "conductivity" and "conductance".

Other compelling reasons for evolving separate scientific terminologies in the regional languages include the fact that basic concepts of science often have their roots in primitive experience. The training of skilled workmen and craftsmen could most easily be carried out in the language of the region concerned. Further, the large-scale "popularization" of science can be achieved only if done in the regional language. In an age of science a language would lose

much of its value and vigour, even its viability, if it lacks an adequate vocabulary to express the facts and ideas of science.

Pioneering Work in India

In India a considerable amount of pioneering work has already been done by a number of organisations in different parts of the country, and in particular by the Central Hindi Directorate of the Union Ministry of Education.

Glossaries of scientific terms required up to the higher-secondary level have been prepared in practically all the science subjects. However, much still remains to be done. Apart from the preparation of terminology for use at the under-graduate level (and above) and to meet the demand for "popularization of science" the work already done needs to be given a "final shape" and the new terminology brought into effective use. Related to this is the problem of text books. Earnest consideration should be given to the preparation of standard text books of science for use at the school level. Suitable authors (a team of active scientists and school/college teachers) may be invited on a national basis to produce standard text books which could be translated in different languages. This will not only serve to coordinate scientific terminologies in the regional languages but would also lay the foundation of a sound science education.

The Government of India have set up a Central Commission for Scientific Terminology to deal with the general principles to guide the preparation of scientific terminologies in Indian languages, undertake preparation of a standard terminology in Hindi, coordinate the terminologies in the regional languages, and take steps to reduce the gap between the preparation and actual utilisation of the new terminology.

In selecting or evolving Hindi equivalents for technical words, as far as practicable, we should choose words (subject to the requirements of easy intelligibility and accuracy of meaning) which are common between as many of the regional languages as possible, apart from transliteration to suit the different grammars. (In seeking to make scientific words or roots of words common between different languages, care must be taken not to make the terminology unduly terse, purist or remote for the users.)

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MY HISTORIC SPACE TRIP

By ALAN B. SHEPARD

It has been some weeks now since my space flight, and things are back to normal in our Mercury programme. We're all delighted with the May 5th success, but it was just one of our objectives, and we have no time to waste.

Nothing has changed for me, personally, except that I am also devoting quite a bit of my free time to answering the thousands of congratulatory cables and letters from all over the world. Actually, I have mixed feelings about the publicity; while I find it pretty much of a burden, I strongly believe it is essential in a free society.

As for the flight itself, it went very nearly perfectly. In a sense, it was uneventful. We found nothing alarming, unusual, or unexpected. The important thing, I feel, is that we have made our first step into space. We have demonstrated man's ability to operate in the space environment. And we consider the flight most encouraging from a technical standpoint.

Only a few slight modifications have been decided on as a result of this particular flight. For example, a pressure gauge in the spacecraft cabin was in a place that made it hard for me to see. We are changing its position. Some operational procedures—by that I mean voice communications links between the spacecraft and the ground—were not satisfactory. They, too, are being modified.

Project Mercury, from its inception, has been a carefully laid out programme of logical steps. Its objective is clearly defined: To develop a system for getting man into space and bringing him back, and to analyze his ability to work for extended periods under weightless conditions. This has absorbed and will continue to absorb most of our interest in day-to-day meetings, discussions, and study groups.

Prior to my flight there was a progression of laboratory tests checking out the reliability of the systems and subsystems of the rockets and spacecraft. The equipment also withstood some pretty rough treatment. As we—and I mean hundreds of scientists and technicians as well as the seven astronauts—ironed out "bugs," we sent the systems aloft in space tests. We got valuable data back on such things as compatibility of the rocket and space-craft, reliability of the escape system, and integrity of all of

the complex mechanical and electronic devices under flight conditions.

Our confidence in the spacecraft was considerably enhanced last February when it was given the most violent ride it could reasonably be expected ever to take. It was boosted by an Atlas, the powerful rocket we will use in the orbital missions, into a trajectory that produced a very oblique re-entry angle. The craft survived terribly severe aerodynamic buffeting and heating with hardly an untoward mark. Needless to say, we were all happy about that one.

Another satisfying test flight concerned the chimpanzee Ham. This flight was supposed to be almost identical with mine. But something went wrong. The Redstone's fuel burned too fast and the trajectory was "off nominal" by a good bit. However, the escape sensor worked perfectly. The solid-fuel escape rockets fired as they should have. Ham got a better ride than we expected, travelling higher and more than a hundred miles farther than planned.

The time was approaching for the first manned flight. All the systems were chocked out. Everything was near readiness. Of course, when the Russians announced that Major Gagarin had been recovered from space we felt pangs of disappointment. But, at the same time, were glad to learn that man was able to survive in space.

The seven of us had trained long and hard for this flight and the ones to follow. We had learned the parts of the spacecraft cabin so thoroughly that we could, like a sightless organist, run our fingers over all 127 controls, switches, and buttons in the dark without a false move. We had gone through innumerable simulated flights in training machines. We were subjected to artificial conditions similar to, but much more extreme than those we were expected to encounter in flight. In our pressure suits, we went through periods of simulated high altitude and high heat load.

We became acquainted with the tremendous forces of acceleration and deceleration. In a spacecraft, this is the force that presses you back into the foam rubber couch as you speed up and slow down. Professor Einstein says it is indistinguishable from the force of gravity itself. Your normal weight is due to the pull of gravity. So, when your body is acted on by high

loads it actually weighs many times more than it normally does. The greater the number of G's, the more your blood is forced away from your brain, until first your vision clouds and then you black out. In our training course, high 'G' loads were attained by whirling us around in giant centrifuges, which have been described as "cream separators." In these machines, we not only experienced the force, but we learned both to resist it by tensing our muscles and to perform work and speak at the same time.

This left only one true unknown factor, one which could be sufficiently experienced only in space. It was weightlessness. This was of great concern to everyone. None of us had ever experienced weightlessness for more than a minute at a time. The condition was produced in aircraft flying a prescribed arc that balanced centrifugal force against that of gravity. During those short periods, then sensation was very pleasant and we tried to perform tasks. But the periods were too brief for effective conditioning and training, and for physiological changes to show up. The flight I was about to take produced five minutes of weightlessness, and our later orbital flights will give us perhaps four hours.

As the day of the flight came, the tension which had gradually built up in the preceding weeks, indeed, in the preceding two years, reached an enormous peak. All of us were confident. But, it was humanly impossible not to feel some twangs of apprehension.

I had breakfast with astronaut John Glenn, my backup pilot, and Dr. Bill Douglas, our flight surgeon. After a medical checkup, sensors were taped to my body for measuring heart action and breathing rate. I suited up and got in the van for the ride to the launch pad. It was still dark, about 4.30 in the morning. The pad was flood-lighted, and I looked up at the slim, white, fully-fuelled, frost-covered Redstone I knew I would never see it again.

I eased myself into the Mercury spacecraft, fastened to the top of the Redstone. There was really no time to reflect. The countdown was underway, and I was carrying out my part in the procedure. Three holds—for a weather check, replacement of a faulty inverter, and a computer problem—delayed things about two hours. I was getting impatient. Finally, at 9-34 A.M.—lift-off.

I knew the "bird" was shooting fire under me. But the liftoff was smooth, surprisingly smooth. Noise and vibration were no problem. It was very pleasant.

I had no trouble reporting flight conditions to "Deke" Slayton in the Mercury Control Centre, which I was rapidly leaving behind on the ground below.

At about plus one minute, we passed through rather unexpectedly heavy buffeting and vibration. The "bird" had reached the transonic speed range and was butting through the so-called sound barrier. It was also in the region of maximum dynamic pressure, where the air and velocity of the rocket combine to produce some turbulence. We knew this would happen. But, as I said, the effect on me was a bit rougher than estimated.

During acceleration, the G load built up gradually and reached a peak of six. Instead of my normal 160 pounds, I now weighed 960. Then the Redstone burned out. We were moving at 5,100 miles (8160 kilometers) an hour. The escape tower, no longer needed, was blasted free. My craft separated from the rocket shell. At this point I weighed nothing. The craft automatically turned a half-somersault, assuming what we call the orbital attitude. I was now facing backwards to the direction of flight.

Until this time, everything in the flight was automatic. This was when I took over control of the spacecraft. By moving the control stick, I put the craft through various rolling and turning manoeuvres, one after the other. These are started and stopped by several low-thrust hydrogen peroxide jets on the outer surface. Although the craft ordinarily scales in at more than a ton with me in it, the jets easily push it around in the near vacuum of space.

After the manoeuvrability test, I looked through the periscope. The view took my breath away. It was extraordinarily beautiful. But, I could spare only a moment for sight-seeing. I had been briefed on the ground about the land masses and cloud covers that might be visible as the spacecraft was approaching its 115-mile (184 kilometers) apogee.

I was able to distinguish landmarks of various sizes. I very clearly made out the Florida Peninsula, Lake Okeechobee, Andros Island, and Bimini. I was able to identify

fy the Bahama Islands although they were partially hidden by clouds. Cape Hatteras, about 600 miles (960 kilometers) away, unfortunately was completely obscured by cloud formations. My estimate of a 30 to 40 per cent cloud cover remains to be verified.

I had little opportunity to look for stars. None was visible, perhaps because my eyes did not have time to adjust. Had we lifted off at 7-00 A.M., as scheduled, the moon, venus, and saturn would have been in a nice array to the southwest out of my left porthole. But the moon had set by the time we got up to apogee.

We were about ready now for the re-entry phase, as Deke informed me in my earphones. In preparation for firing of the retro-rockets, I pitched the blunt leading end of the space craft up to 34 degrees above the horizon. Actually this sequence was unnecessary, because we could have re-entered automatically without my intercession. But, we wanted to test these braking rockets, which are required to bring a craft out of a true orbit.

I initiated the retro-sequence, and the three rockets fired one after the other in an overlapping pattern. Then I pitched the blunt end downward into its proper-re-entry attitude and switched on to automatic control. The deceleration forces grew as we hit the atmosphere.

I continuously reported in the control centre. With decreasing altitude, the air grew denser and denser, frictional resistance rapidly built up, and within a half-minute we reached a peak of more than 11 G. At this point I weighed nearly a ton. My voice came out in grunts, but understandable, as my muscles strained against the force.

At last, our small stabilization parachute opened at 21,000 feet (6300 meters). A little more than a mile farther down a valve opened, bringing in fresh air. At 10,000 feet (3000 meters), the beautiful orange and white main parachute unfolded out of its "cocoon" and blossomed overhead. Just about 15 minutes after leaving my friends at Cape Canaveral with a swoosh of flame, we came down in the sea 302 miles (483 kilometers) from the still-hot launching pad.

A helicopter arrived in a few moments, hoisted me aboard, hooked onto my sweet "Freedom Seven" (the name we seven astronauts agreed on for the spacecraft), and

carried us both to the deck of the USS Lake Champlain.

It was a marvellous flight. We proved what we hoped to prove. "Freedom Seven" responded like a charm to my commands. Weightlessness, at least five minutes of it, was no hindrance to my activities. Just one minor fault marred an otherwise perfect performance. A green signal failed to light in my cabin after the retro-package was jettisoned. To make absolutely sure the package was gone, I pushed the override button, and the green confirmation signal lighted as it should have.

This isn't the end. It's just the beginning. Step by step, as we acquire new knowledge and develop advance hardware, we will send single pilots and whole crews out to lunar orbits, lunar landings, and eventually landings on our neighbouring planets. Our understanding of the solar system should grow accordingly. This is not a grandiose dream, though I do not expect it to happen tomorrow. The whole world will have a grandstand seat as the programme unfolds in the coming years and decades.

SCIENTIFIC TERMINOLOGY AND SCIENTIFIC PROGRESS

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of the terminology who, in general, will possess little knowledge of classical languages and etymology). In inventing new Hindi words the possibility of using the current English words should be always kept in view. Incorporation of suitable English words would enrich the language. New words should not be coined merely for the sake of it.

The development of scientific terminology in newly developing countries must be viewed as a dynamic process which has an impact on, and which in its turn is influenced by the growth and progress of science and language in the country. One is dealing with a creative and dynamic situation and as such one should not attempt to solve the problem for all time. We should seek a solution which would make the process of learning of science easy in the context of the present and the near future. It should also facilitate dissemination of science in the community, and help to create in the country more and better science all-round.

One Official Language For India

By Dr. V. K. R. V. RAO

I do not know if it is necessary to argue the case for having one official language in a nation—state that has so many national languages. It is not possible to follow the example of either Canada or Switzerland and make official languages of all the national languages for the obvious reason that we have so many national languages in India. Nor is it practical to have two or three official languages, for the question of which Indian language to choose for this purpose will be much more intractable than will be the case if only one Indian language is chosen for this purpose.

One Language

There can be no doubt that an official language is necessary for purposes of the Union Government and for communication among the state government and between the state governments and the Union Government. Above all there must be one language which will bring the masses together and act as a channel of inter-communication between the various languages that they speak. Nor can it be denied that on the international stage it would be very odd for an old and historic state like India not to have a linguistic identity of its own. India, therefore, must have one official language. The question then arises as to what this should be.

I suggest that by definition, a foreign language cannot be the official language of an independent state that wants to rank itself as one nation. There are certain things that are automatically associated with a nation state. These are a national flag, a national anthem, and a national language. Where the nation is a multilingual state, then one of them has to serve as the official language of that nation. To suggest that one of the national languages cannot be the official language because there can be no agreement as to which one it should be, as is some time suggested in India, is nothing more than to deny the reality of the existence of one Indian nationality.

To argue that it is convenient to have a foreign language as one's official language because it is the largest current international language is to go against the practice of all the independent nation states in existence which have native languages. If convenience were to be the only criteria, then it is much more convenient to have one offi-

cial language for all the nations of the world. But a nation is not just a collection of individuals who have come together for convenience. Nations exist because there is some separate link, binding together the citizens of each nation, which is more than one of expediency or convenience. Ever little Denmark has Danish as its official language and no Dane would contend that his country should adopt English or French or Spanish as his official language because of the International character of these foreign languages.

For any Indian to argue that a foreign language should be his national official language on the ground that it is convenient for international intercourse is to proclaim to the world at large India's disbelief in the reality of the national character of his country. To suggest that English is not a foreign language for India on the ground that it has been used in this country for the last 150 years is to ignore the existence of the native languages which have been used in this country for many more centuries and by many more millions of Indians. To plead for English on the ground that it served to unify the Indian people into a national movement would be on par with the thesis that one should bring the Englishman back to power in India in order to unify the Indian people with a sense of Indian nationality. Undoubtedly English served to bring together the intellectuals of India under British rule; but the Indian masses joined the national movement and forced the foreigner out, only because, their intellectual leaders spoke to them in their own languages.

It was not by speaking to his people in English that Gandhiji brought freedom to his people. Nor can it be denied that his leading followers roused their fellow-lingual masses and brought them in multi-lingual array behind the national banner by speaking to them in their own language and not in English. Intellectuals are important, but the masses are even more important. It was not through the English medium that the masses got welded together, and the use of Indian languages even if it meant using different languages in different areas, did not prevent these multi-lingual masses from sharing a common feeling of one Indian nationality.

To command the respect of others, one must have first respect for oneself. If we cannot have sufficient respect for one of our national languages to make us accept it as our official language, then how can we expect the world to respect our languages and literature or even accept us as a genuine nation?

Two Stories

When I see the zealous enthusiasm of some of my fellow countrymen for the adoption of a foreign language as our official language, I am reminded of a story I heard as a small boy many decades ago. There was a strong-willed man, good but jealous of his neighbour, who performed many austerities and got three boons from the god whom he had prayed to. The boon was that this man could have whatever he wished but, the god added, the neighbour would get double of what he would get. The man asked for much gold and got it; but his neighbour got double the amount. He then asked for a palace and got it, but the neighbour got two palaces. Full of rage, the man asked that he should lose one eye so that his neighbour could lose both eyes, and his wish was gratified. This is an Indian story.

The other story that I remember is a foreign story. It tells of two women both claiming the same child as their own and the judgment that the child could be cut into two equal halves and given to the two claimants; upon which the genuine mother gave up her claim, for she wanted her child to live rather than enforce her legal claim to see it dead. I am sure there is a moral in this for those who want to see.

All that I would say is this: because we are a multi-lingual people and nevertheless want to be one nation state. those of us whose own mother tongue cannot be the nation's official language have to pay the price of having another language as the official language. Surely the price is less, if the language we accept is an Indian language, one which has been born in this country, has had its home here for many centuries, and is spoken by many millions of our own people.

Hindi in Devanagari

If it is agreed that our official language should be an Indian language, then there can be no two opinions about which of the Indian languages should be selected for

this purpose. That was why the framers of our constitution unanimously decided that Hindi in the Devanagari script should be our official language, the Indian **Rashtra-Bhasa**. And this was supposed to come into force from 1965.

Unfortunately the position has changed since then. Unanimity has given place to disagreement and discord, and we have had the sad spectacle of Indians openly proclaiming that to them Hindi is as such a foreign language as English and that between these two 'foreign' languages, they would prefer English to be the nation's official language. We have seen Parliament adopting a resolution to make English an "additional official language" and we have seen official assurances that this dualism would continue indefinitely. India has two official names, two independence days, two national anthems. And now India will have two official languages. Where will this dualism end? Must ambivalence always dominate our thinking!

Meanwhile, what the world sees and what our children see is a country that glories in its subjection to a foreign language. The capital of independent India is conspicuous for the universal presence of English and the almost total absence of Hindi. A few months ago, the Delhi Administration gave its traffic constables a 'stop' disc for regulating the traffic; but the disc was inscribed in English. Our traffic lights say 'go' and 'stop' in English. Maybe they are right, for is not the road meant for car owners and do not all our car owners prefer English to Hindi?

What does it matter if the majority of the pedestrians are not fluent in English. After all, they are only the masses and the masses can always get used to foreign symbols. Rather more difficult to understand is the van of the Delhi Milk Scheme which goes round Delhi proudly proclaiming its wares to the people in the chosen language of our ex-rulers. It is difficult not to hang one's head down in shame when one hears the truncated and abbreviated Hindi instructions given by air hostesses on Indian planes or by air transport officials in Indian airports while sonorous, rich and full with Indian accent, follow the instructions in the English language.

I have no quarrel with English; in fact, I must confess to my shame that it is the only language I can handle with ease. But

I am 52 and was born when we were still not free, and I am a professional intellectual. But that the same thing should be happening to my children and my neighbour's children is something I cannot understand. For we are now free, we call ourselves a nation, and we are trying to build ourselves as a nation. But we evidently believe that this can be done on the basis of a foreign language. We seem to think that the masses do not matter, as far as language communication, and emotion is concerned, as long as the classes feel at home in English and do their duty by the masses by promoting their economic development. Must we give up our inheritance even if it be for more than a mess of pottage?

Is there not something like national self-respect, national pride, that can give zest to our masses and release their productive energies? Cannot we whose mother tongue is not Hindi put up with the advantage that our Hindi brethren may gain or must we subject all of us to the same handicap in order to be equally unfree? It is not the fault of the Hindi-speaking people that they are the largest linguistic group in the country. If the country will accept a minority Indian language as the Indian official language, by all means let us do so. But let us not throw away the baby with the bath tub in order that all of us in India may be equally handicapped in the matter of language.

If a large multi-lingual area like India will insist on being one nation—and I believe there is no controversy on this—then let us accept the linguistic implication that follows and adopt one Indian language as the official language. Language is an inseparable attribute of a nation, and if India is to be a nation, then Hindi alone can be our official language. But even if this view of mine is not accepted and we insist on having two official languages, Hindi and English, let us start doing something implementing the decision regarding Hindi so as to make it a real official language. And let us start doing it in right earnest.

It is good we have Five-Year Plans for economic development. We have finished two and have now started on a third. Let us also have a plan for the development of our language—national and official. Let not this plan be merely thought of in terms of

academic linguistics. Let it rather be linked firmly to the theme of unifying the classes and the masses, the regions and the masses, the regions and the centre, in short, an Indian people, who can communicate with one another and feel that they belong, wherever they may find themselves, to India. I hope that this plea will find its way to the ears of those in authority who are so busy today planning the economic development of India.

(Courtesy 'The Indian Express')

NEED TO DEVELOP NATIONAL CONSCIOUSNESS

(Continued from page 786)

will against any nation nor any aggressive designs. Nationalism narrowly conceived has its own dangers when it is directed against other nations. That has not been our nationalism at any time. It has been a peaceful and a liberating force. At this stage of our development, when inner conflicts and tensions raise themselves, nationalism will have the same liberating and healing influence. Moreover, it is only when we are united as a nation that we would be able to play our part as effective and equal partners in the community of nations.

In our Constitution, education is the responsibility of the State Governments and still in such important matters where question of cultural harmony between different communities or of national integration are concerned, the Ministry of Education at the Centre cannot remain indifferent. It has a certain responsibility for safeguarding the cultural interests of the minorities and it must ensure that the national policies and programmes prescribed by it are properly implemented. This requires a closer collaboration between the Central and State Governments without, of course, infringing upon the autonomy of the States than we had in the past.

Read with the feeling that you are comprehending fast, that you are thinking along with the author, that you are reacting critically to what he says—Norman Lewis

* * *

This world has cares enough to plague us, but he who mediates on others' woe shall, in that mediation, lose his own.

—Cambridge

Iraq And Kuwait

By OBSERVER

Iraq's emergence as a Nation State is the result of the dissolution of the Ottoman Empire and its distribution among the Allies after the first World War under a Mandatory system sponsored by old League of Nations.

Iraq was put under the British as a mandated territory. Great Britain relinquished the Mandate in 1924. Amir Feisal was made King and a treaty of alliance was concluded. Three years later, the independence of Iraq was recognised in return for new air bases. Though virtually independent and the country was admitted to the League of Nations and to the 1937 Baghdad Pact, Iraq and the neighbouring Kingdom of Jordan remained British Protectorates. These political changes and alignments never affected the Arab Sheikhdoms on the Persian Gulf coast. They continued to be autonomous or independent territories and the Treaty of Protection entered into between Britain and Kuwait was at no time seriously questioned or disturbed. This treaty, dated from 1899, ran its term till June 19 this year when Great Britain withdrew and recognised the independence of Kuwait. The Agreement of June 19 provided, however, for British protection against external attack. A significant fact which must be taken note of at this stage is that on June 13 this year Iraq herself supported Kuwait's application for membership of the International Labour Organisation.

It is against this background that one must view the current excitement and dramatic developments following the Iraqi claim to Kuwait territory. Addressing a press conference General Abdul-Karim Kassem, Prime Minister and Sole Leader of Iraq, declared that Kuwait is an integral part of Iraq, that the 1899 British treaty of protection was **forged**, that the treaty of friendship and consultation entered into between Kuwait and Britain on June 19 is **illegitimate**, that it has been signed by irresponsible people who are under the sway of imperialism, and that Iraq will extend its borders to the south of Kuwait.

A statement, which has escaped the notice of commentators, is of far-reaching consequences. Repudiating the June 19 Agreement between Kuwait and Great Britain, Kassem observed that Britain was plot-

ting against Iraq and the Arabs by attempting to form a South-East Arab Federation including Kuwait and other Sheikhdoms in the Persian Gulf. The agreement with Kuwait itself, he said, was an attempt by Britain to reassert its position in Kuwait and check the progress of the Arabs towards the Indian Ocean.

Thus, it is clear that Kassem's ambitions are not confined to the grabbing of Kuwait alone. His ambitions are far greater. He wants to build an Empire for Iraq. In this adventure Kuwait is the first bait. Once he is on the stride over this Sheikhdom, pressure on others will follow. Occupation of and control over Kuwait will make it easy for him to make short work of the two small neutral zones on either side of Kuwait, after which the march southwards will begin. The logic that Iraqi people are Arabs and those of Kuwait are also Arab, and hence Kuwaitis are Iraqis, can be extended, till all Arabs become Iraqis. The whole idea smacks of the Sudetism of Hitler. It is a dangerous idea, pursuit of which will only revive old Arab rivalries.

Be this as it may, let us consider on what Kassem bases his claim to Kuwait. Kuwait, he says, was part of the province of Basra in the former Turkish Empire and that Britain had recognised this both before and after the signature of the 1899 Treaty. To put it differently, since Basra is in Iraq and Kuwait was part of the Basra Province under the Turkish (Ottoman) Empire, Kuwait is Iraqi. What was Iraq itself under the Turkish Empire does not come into Kassem's argument or thinking.

In order to understand the fallacy of Kassem's argument and claim, it is necessary to have some idea of what the Turkish Empire was and what it symbolised. It was tied with Islamic history and the institution of the Caliphate. It was a theocratic State and the Khalifah was the Temporal and Spiritual Head, of all Muslims. The institution had its origin after Prophet Mohammad's martyrdom. The first four Khalifahs were the closest associates of the Prophet and everything went well. The Islamic Empire spread rapidly, became unwieldy and disintegrating tendencies appeared. Amir Maviya was the first to revolt and he founded the Omayyad dynasty. This was overthrown by the Abbasids. The

Abbasids devised a rational system of administration and provinces were created and put in charge of Governors. The seat of the Abbasid dynasty was Baghdad. In order to maintain the semblance of unity, it was agreed on all hands that the ruler of any constituent unit of the Empire could carry on as King in his territory after obtaining formal recognition of the Khalifah.

With the passage of time the system deteriorated and the Khalifah became a mere titular head. The system did not survive in its original form and internecine disputes and conflicts considerably weakened the Khilafat. Ultimately the seat of the Caliphate shifted to Istanbul, the capital of Turkey, with the founding of the Ottoman Empire. Though the world of Islam still continued to recognise the Sultan of Turkey as the Khalifah, the Caliphate itself had lost all its power and authority. The end of the First World War saw the Ottoman Empire dismembered and the rise of the Ataturk—Mustafa Kemal Pash—struck the final blow. The Khilafat ceased to exist. We have already stated what happened thereafter.

On the dissolution of the old Turkish Empire to which Gen. Kassem has made reference, there was no successor to the title. With the dissolution of that Empire every link of its administrative system stood dissolved. The province of Basra also stood dissolved. There is thus no warrant to sustain his claim based on the administrative arrangements associated with the Ottoman or Turkish Empire. His other assertion that the British Government knew and had accepted Basra's overlordship over Kuwait as part of the old Basra province, before and after the Treaty of 1899, also cannot be sustained. If that were so, how could the Sheikh of Kuwait unilaterally ask for British protection over the head of the Governor of Basra? It is, perhaps, this very curious circumstance which has impelled Kassem to denounce the 1899 Treaty as a forgery. Historically, therefore, there is little substance in Kassem's claim that Kuwait is an integral part of Iraq. Another repudiation of the claim is provided by the reaction his claim has produced in the Arab world. Every Arab country has rallied to the support of the Sheikh of Kuwait. The only result of Kassem's blustering statement of June 25 is that Iraq stands isolated in the Arab world and is isolated by the Arabs themselves. A more valid support to

the Sheikh's claim to the independence of his country cannot be thought of.

Why, then, did Abd-ul-Karim Kassem blunder into this absurdity? What made him make the claim? That is the way Dictators act when the situation in their own country becomes insufferable, when the Dictatorship itself is threatened. Dictatorships are chauvinistic. They thrive on the passions of the people conjuring up visions of territorial expansion and conquests is the familiar way employed to rouse passions of national patriotism. The prospect of war and conquest creates a national frenzy. Political polarities and conflicts recede into the background. The Dictator is safe for the time. Does this explain Kassem's latest adventure?

The Iraqi Army revolution of July 1958 which brought Kassem to power changed the whole character of the country. He and his close associate, Abd-ul-Saleem Mohammad Aref, formed a new Government. All traces of the old monarchy were wiped out. The new Government included civilians. It started with a sober programme of internal reform and external friendship. Union with Jordan which was a counterblast to Nasser's United Arab Republic, was dissolved. This immediately created a congenial atmosphere for the ascendancy of Arab Nationalism inside Iraq. Friendly relations with Egypt and Syria were established. Britain was also assured of friendly intentions and her oil rights were guaranteed. Iraq withdrew from the Baghdad Pact. This brought more good will. Internally, the new Government emulated the Nasser example and announced a programme of land and other reforms. Indeed, everything seemed to go well and Kassem appeared to be well on the stride.

The new Iraq was soon recognised by other countries and diplomatic relations were established. Trade relations with Soviet Russia also grew and Russian arms were supplied to the Kassem Government. Throughout there was a burst of Nationalist enthusiasm in the country and hopes were entertained that Iraq would also line up with Nasser as Syria had done. Mohammad Aref himself strengthened this hope. But Kassem was cold to any such idea. No one knew his mind. But soon things began to happen. Aref was stripped of his position as Deputy Prime Minister and later

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Price Mechanism

By Smt. TARKESHWARI SINGHA
Union Deputy Minister, Finance

There is little doubt that from the point of view of the economic future of our country the coming years are going to be crucial. Our ideas as to what may be done within the country for accelerating economic development are bound to be influenced largely by our estimate of the price mechanism and its functioning. We shall be devoting our attention to such basic problems as: what is the function of the price mechanism in economic planning? What should be the objectives of price policy in the context of a mixed economy like ours? Are there any broad principles in the formulation of price policy which have a relevance in the context of economic development?

Most of the discussion on price policy is about the need for holding the price line and about the measures that would be necessary in the coming years to achieve this. Of course, this is an important aspect of policy. A reasonable degree of stability in the general level of prices is evidently a desirable objective of price policy. Even if it is not possible in a period of rapid development to achieve a completely stable price level, it is important to ensure that the rise in the price level does not result in a steady and predictable erosion of the value of money. Otherwise, there will be a premium on holding goods instead of cash and on spending rather than saving.

Price policy in a planned economy like ours must be concerned not only with the movement in the general level of prices but also with the maintenance of an appropriate balance between relative prices. A price policy should be looked upon not merely in terms of pricing of commodities and services but also in terms of prices of various factors of production so as to ensure the attainment of the planned objectives.

Important Role

In a mixed economy like ours, where a substantial part of economic activity is in the private sector, the price mechanism has an important role to play. Decisions regarding what to produce, how much to produce and how are mainly based on prices of products. This was recognized in the first Plan document.

One cannot, however, rely entirely (or in some cases even mainly) on the free play of market forces. The prevailing price-rela-

tives in an underdeveloped economy are often the results of market imperfections or rigidities. Not can be changes in relative prices, by themselves, always bring about the necessary reallocation of resources quickly or adequately.

Moreover, in a developing economy the basic trend of governmental operations in the fiscal and monetary fields is inevitably expansionary. As the second Plan pointed out, "generation of new demands somewhat ahead of supplies is part of the strategy of development. . . there is always a certain lag between the creation of new incomes and the increase in available supplies on which they can be spent. Yet a developmental programme cannot be abandoned or scaled down at the first appearance of difficulties or obstacles. A measure of risk has to be taken. This means that there must be corresponding preparedness to adopt fiscal controls and allocations as and when necessary."

Economic policy in a planned economy, therefore, must influence the allocation of resources through direct controls, allocations, taxation and subsidies, so that it conforms more closely to the objectives of the Plan.

In other words, our approach to the role of price mechanism in planning should be based on these premises: the structure of relative prices has an important role to play in allocating resources; secondly, the price mechanism should be used to the extent possible to ensure the flow of resources into the desired directions. It has, however, to be clearly recognized that a development plan cannot depend entirely on the existing price relatives, or on the changes in relative prices by themselves bringing about the desired reallocation of resources; and that the Government has a positive role to play in using the price mechanism for planning.

Price Stability

I think there is a certain amount of confusion on the question of price stability. A price rise is not, by itself, something to be regarded with distrust. In every country a rise in the proportion of national income going into investment sets up forces that induce an upward adjustment of prices in the sectors in which expansion is relatively large or rapid. Such a rise in prices

is indeed necessary and it need have little effect on prices in all the other sectors of the economy. This kind of a rise in prices is what may be called a "functional" rise in prices as distinct from an "inflationary" rise in prices. In the case of an inflationary rise in prices there is a general price increase and it is not accompanied by any significant increase in output. The point that deserves to be underlined is that one must always consider prices and output together before coming to a judgment about the nature of the price rise. I would even say that a rigidly stable level of prices during a period when we want rapid development can be as much a hindrance to economic growth as a rapid or general rise in prices.

Price flexibility in respect of individual commodities thus has an important role to play in planned development. However, there are certain prices which should not be allowed to rise. An important aspect of price policy is to distinguish between prices which could be permitted to find their own level and prices which have to be prevented from rising to any great extent. Evidently, prices of wagegoods i.e. commodities and services that absorb a large part of wage incomes, have to be firmly anchored because, otherwise, there is the possibility of a cost inflation resulting from demands for higher money wages. There is also the danger that exports will be affected by higher costs.

In concrete terms, this means that a reasonable degree of stability in prices of food grains is essential in a planned economy. I would add, however, that holding down food grains prices is not sufficient because with improved living standards, an increasing proportion of the wage packet is likely to be spent on food articles other than food grains. There should be no harm in permitting a rise in prices to ration out limited supplies in the case of goods which are less essential items of consumption and which do not enter into the cost of production of other goods. A rise in the prices of essential consumer goods will mean a rise in the price of labour and, therefore, in the cost of production. In the case of machinery and raw materials also, a system of licensing which permits direct imports by users is a preferable alternative to allowing prices to rise because of restrictions on imports.

The main point, therefore, is that we

should try to prevent any rise in prices which is unlikely to increase output. The question whether a rise in prices is permissible or undesirable really depends upon how it affects output. Where increase in output follows a rise in prices, the price rise will be temporary because, with increased supplies, prices will come down again. But if with a rise in prices output does not increase or even if output increases, savings in the community fail to increase sufficiently to match the rise in the output of non-consumption goods, there is the danger of such a price rise becoming self-accelerating.

Relative Stability.

On the question of relative stability in the price level, the outcome would really depend on how far the Plan itself provides for an adequate balancing of demands with supplies. For instance, in the third Plan the target of food grains production is placed at about 100 million tons and there are to be substantial increases in the output of a number of other consumer goods, such as textiles and sugar. To the extent possible, we have in our planning kept the needs of essential consumption in mind and the attempt has always been to increase the supplies, at least, of the more essential commodities.

Nevertheless, there have been imbalances between demand and supply and in the third Plan also one will have to be prepared to take timely and effective action to correct any excessive pressure on prices of essentials. In particular, it is important that prices of food grains are not allowed to rise unduly (or allowed to fall excessively either). A relative stability in prices of agricultural commodities has to be an essential element in any price policy.

The immediate prospects in regard to prices of food grains are satisfactory. The crop this year has been very good and a total production of food grains of over 76 million tons is expected. The longer-term PL-480 agreement with the USA under which we can import some 17 million tons of food grains, including one million tons of rice, will supplement local production and also enable us to build up a sizable buffer stock, especially of wheat. Even now the stocks of food grains with the Government are over 2½ million tons. These, together with the prospect of more imports to come and satisfactory crops, should help in steadying prices during the coming year.

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Will 'Teaching Machines' Replace The Teachers?

By DANIEL BEHRMAN

Will the day ever come when your child will step into a booth, put on a pair of ear-phones, watch a television screen flashing a programme from outer space, answer questions asked by a computer—and step out of the booth with an added bit of education?

Probably not, because no one has yet invented a more effective "tool" for education than a good teacher. But research is now being conducted in many parts of the world to develop new educational devices aimed at making good teachers more effective and enabling them to reach a larger number of pupils.

The most familiar of all these techniques, of course, is television. The same process that brings a news event or a variety show into millions of homes, can also be used to bring courses into classrooms. Educational television, either beamed over ordinary channels at certain times, or used in "closed-circuit" systems serving a single school or a school system, is very much a going concern today. It broadens the horizons of the classroom and the child's mind, aiding teachers by offering, for example, science experiments or geography lessons with a wealth of material that no single school could afford.

Teaching Satellites?

But the horizon of television itself is limited by...the horizon. Programmes must be relayed—an expensive process which also limits its educational use. For the present, an answer has been found to the problem in the United States where educational TV is beamed over an area of three states from a high-flying converted airliner. For the future, the answer—which has already been termed technically feasible—may lie in a communications satellite relaying programmes to the entire world from outer space.

In the case of the satellite, technical problems are not the only ones awaiting a solution. For example, who would control the use of such a satellite? Who would decide what programmes it would re-transmit? And who would allocate channels to it? At this stage, one answer seems evident: some form of international co-operation would have to be devised in which national interests could be reconciled.

The impact of television on education

can easily be imagined by anyone who has ever watched TV—and that includes just about everyone to-day in a goodly number of countries. But less is known about another new technique which is arousing interest among educators.

This is the "teaching machine"—to use an incorrect name which everyone uses because it is more vivid than such terms as "self-instruction" or "self-tutoring" devices. Basically, the teaching machine is a new approach to the process of learning. It consists of a device which imparts information to a pupil, obliges him to answer questions as he learns and permits him to continue learning only after he has answered the questions correctly, controlling his progress step by step.

In one of its simple forms, it can be a page with information and questions on one side and the answers, under a cardboard shield, on the other. When the pupil answers a question, he moves the shield to check his answer and then goes on to the next question.

But what prevents him from pecking? Nothing...and that is why more sophisticated versions of the teaching machine have been developed. These devices can be worked by handles or levers, and they do not allow the student to go ahead until he has found the right reply. Some machines even provide an explanation if he chooses the wrong answer.

At a higher level, there are even electronic machines which "remember" at the end of a lesson which questions were answered incorrectly and drill the pupil in them.

Not A Universal Panacea

Proponents of the "teaching machine" are the first to warn against the temptation of considering it as a panacea for the chronic shortage of teachers. They claim, however, that it can relieve the teacher of many time-consuming tasks such as question-and-answer drills or correcting examination papers. Another advantage of the machine is that it enables each pupil to learn at his own pace without bright children being forced to wait for the laggards.

In the United States, teaching machines are used in varying extents by a dozen universities as well as in secondary and ele-

mentary schools on an experimental basis. They are "teaching" such subjects as algebra, trigonometry, French, arithmetic or spelling.

Teaching machines, television, radio and films all have one aspect in common. they set out to enable a single teacher (who may become a telecaster or a writer of "programmes" for machines) to teach a larger number of pupils. The goal, of course, is to find a way out of the present worldwide educational dilemma: to teach a mushrooming school population with a relatively fixed number of teachers and buildings. School buildings on a mass scale are expensive, so are teachers and they are "produced" far less quickly.

There are risks involved, of course. Despite the warnings of educational researchers, technological devices often seem very tempting in their possibilities. In fact, they are too tempting—many people are eager to use these shortcuts without knowing where they lead.

French Resolution

To take stock of these problems, Unesco is calling a meeting of international experts in March 1962 to study the development and use of new methods and techniques of education. This meeting stems from a resolution sponsored by France and adopted by the Unesco General Conference last year which recognized the need for a world approach to the new frontiers of education, and called for international action to achieve the objective of education for all.

To many a thoughtful person, there is something almost horrifying in this prospective attempt to reach children's minds by teaching machines or courses televised from outer space. And yet the possibilities offered by science cannot be allowed to go wasted.

A world in which nearly half the population is illiterate and in which hundreds of millions of children are unable to go to school is much more horrifying—and it is our own world, not a prospective one.

(UNESCO)

How many sacrifice honour, a necessity, to glory, a luxury! —Joseph Roux

* * *

Irrationally held truths may be more harmful than reasoned errors.

—T.H. Huxley

IRAQ AND KUWAIT

(Continued from page 796)

charged with treason and sentenced to death.

As he struck thus on nationalist forces, the Communists gained in influence. Kassem, however, did not take kindly to the Communists either. He struck at them also. Opposition to the nationalists and the communists weakened the army-based Kassem regime. To maintain himself in power, Kassem began playing one political party against the other and for a time this seemed to pay dividends. But in politics it is a slippery game. Kassem found himself devoid of the support of any worthwhile political party in Iraq and his position in the Army also considerably weakened. Kassem's position, wrote Peter Knaut as early as September last, "is threatened by the army, his political mainstay which favours change" and concluded: "It may be too late for Kassem to recover the popularity he enjoyed when he came to power. The Communists have left him very weak" and he has alienated the nationalists. What way, then, is open for him to keep himself on the saddle and in power? A diversion in the national politics suggests itself. And he finds his opportunity in Kuwait since the British have withdrawn'

(Courtesy 'Bharat Jvoti')

PRICE MECHANISM

(Continued from page 798)

Prices are a resultant of varied forces, some of them internal; others external, some operating on aggregate demand, and others operating on demand and supply of particular commodities. There is thus no aspect of economic policy which does not, in some way or the other, have a bearing on prices. It is necessary, therefore, that we should not view price policy in isolation, as a thing in itself. One must view it as an integral part of the general economic policy. An effective price policy will depend ultimately on whether the allocation of resources in the Plan itself is right and whether the implementation of the Plan has been proceeding in a balanced way. In short, no price policy, however well formulated, can be a substitute for a balanced plan, implemented according to schedule; but within the broad framework of a properly conceived Plan, the evolution and implementation of an appropriate price policy can be of assistance in securing the plan objectives.

The discoverer of the planet Pluto once again is searching the sky for an undiscovered heavenly body.

Dr. Clyde W. Tombaugh—Planet Hunter

By FREDERIC APPEL

The young astronomer's hands trembled with excitement as he peered into the blink microscope—a magnifying photoviewer—and flicked the lever again and again. Inside the machine were two photographic plates of the same section of the night sky, exposed six days apart through the Lowell Observatory's 13-inch telescope.

As Clyde Tombaugh pressed the lever, he viewed first one plate, and then the other. Against the black background of space, tiny dots of light—stars—formed identical patterns on the two plates. One faint image, near the star Delta Geminorum, however, seemed to shift back and forth with relation to its neighbours as the two plates were alternated rapidly. What was the shifting dot? The date was February 18, 1930. Had a 30-year search for Planet X finally ended? The search had started at the beginning of the twentieth century. In the previous two centuries, two new planets had been discovered, Uranus and Neptune.

Uranus was discovered by William Herschel in 1781. At first he thought it was just a tailless comet, but orbit calculations proved that it was a new planet. Astronomers soon began to notice small discrepancies between the predicted orbit of Uranus and its actual one, and suspicion began to grow that the gravitational attraction of an unknown planet was disturbing the motion of Uranus.

Two mathematicians, U. J. J. Leverrier of France and J. C. Adams of England, independently studied the irregularities in the orbit of Uranus and predicted the mass, orbit, and probable position of the unknown planet. Leverrier sent his computations to the Berlin Observatory, where in 1846 the new planet, Neptune, was found very close to the predicted spot.

Leverrier told the French Academy of Science that "this success allows us to hope that, after 30 or 40 years of observation of the new planet, we should be able to use it, in turn, for discovering the planet next in order of distance from the sun." However, by 1900, Neptune had still been observed over only a small part of its 165-year orbit—too small a part to calculate the

orbit of a hypothetical planet even more remote.

Dr. Percival Lowell, the founder of the Lowell Observatory at Flagstaff, Arizona, became interested in the problem. He already had achieved lasting fame for his studies of Mars. Since the orbit of Neptune could not be used as a basis for calculations, Lowell proposed to use the very small discrepancies in the orbit of Uranus. These discrepancies remained even after the effects of all known planets, including Neptune, had been accounted for.

Lowell's computations indicated that the unknown body should be in one of two regions, on opposite sides of the sky; they also predicted a mass seven times that of Earth for the hypothetical planet, which Lowell dubbed "Planet X." He decided that one of the regions was more likely than the other, and initiated a search.

From 1905 to 1907, Dr. Lowell searched the sky through a five-inch telescope, with a camera attached. He photographed a certain segment of the sky at a given time, and several nights later, at the same instance, photographed the same segment again. Next he placed one negative over the other. If a dot of light had shifted with relation to its neighbours the dot on the second negative would be slightly to one side of the dot in the first negative. Dr. Lowell's painstaking work went unrewarded.

In 1914, Dr. Lowell and Dr. C. O. Lampland again began searching the sky for Planet X, this time with a nine-inch telescope. In addition, they had obtained a Zeiss blink microscope to compare the photos. This instrument presented rapidly alternating views of two plates of the same section of the sky, but exposed on different nights. Any image that had changed position between the two exposures would appear to jump back and forth as the lever was used to show first one, then the other plate.

In 1915, after a 15-year-long study of the orbit of Neptune, Dr. Lowell had still not discovered Planet X, but his calculations told him that the planet had to be there. He and Dr. Lampland continued the search until 1916.

The work was continued by Dr. Lampland and Drs. V. M. and E. C. Slipher, after Dr. Lowell's death in 1916.

In 1919, W. H. Pickering of Harvard Observatory, in Oak Ridge, Massachusetts, finished a theoretical study of the orbits of both Uranus and Neptune from which he also predicted a planet beyond Neptune, and in fact agreed closely with Lowell's prediction.

Meanwhile, a young farm boy in Burdett, Kansas, was busily working on his favourite hobby, astronomy, with a home-made telescope. He had ground his own reflecting lens and with parts from an old cream separator, a discarded straw spreader, and the shaft of an old automobile, Clyde W. Tombaugh had assembled a fine nine-inch telescope.

In 1925, Clyde's high (secondary) school graduating class prophecy forecast: "He will discover a new world." Since his family was unable to send him to college, he went to work on his father's farm.

One particularly clear night, focussing his telescope on the planet Mars, Tombaugh saw a network of fine lines on the planet—the so-called "canals." He quickly sketched what he saw and mailed the drawings to the Lowell Observatory, eager to check his drawings against the observations of experts.

The astronomers at Lowell Observatory were impressed with the work of this young amateur astronomer. Mars' "canals" have remained a mystery to this day. Several astronomers have sketched them, but the "canals" have never been photographed successfully.

Young Clyde was soon offered a job at the Lowell Observatory and in January, 1929, he reported for work. His assignment: Find Planet X!

In March, a special 13-inch photographic telescope donated by the late astronomer's brother Lawrence Lowell and designed especially for the search, arrived at the observatory. Soon Clyde was busy exposing photographic plates—capturing one segment of the sky at a time—and then comparing the plates in the Zeiss blink microscope. The work was slow and tedious. Night after night he exposed his plates. By day, he studied them in the machine.

Each plate contained 50,000 or more images, and every one had to be studied

carefully. As the area of the sky being photographed approached the Milky Way, the number of stars recorded increased. Some plates contained 400,000 stars. Work with the blink microscope began to fall behind schedule.

On the afternoon of February 18, 1930, Tombaugh was working on plates containing the star Delta Geminorum. Late in the afternoon, he had examined one quarter of the plate area. Then he saw it! In the blink microscope a tiny dot of light was jumping back and forth over a distance of $3\frac{1}{2}$ millimeters. "That's it!" he exclaimed.

The plates had been exposed on January 23 and 29, 1930. Photographs of a planet at the predicted distance, taken six days apart, could be expected to show displacement of three to four millimeters on the photographic plates. An asteroid (a minor planet) would have shown greater displacement. Tombaugh got out a third plate, of the same region, that had been exposed on January 21, but its quality was too poor to use for "blinking." It, too, showed an image in the proper location; he rushed to report his findings to Dr. Lampland and Dr. V. M. Slipher.

On the next night, to make certain, they again aimed their telescope at Delta Geminorum, and exposed a fourth plate. Sure enough, the new plate showed a displacement of about one centimeter since January 29.

Now that the astronomers knew where to look, they focused a powerful 42-inch telescope on that part of the sky. The dot of light showed up as a pinpoint, but when known planets were viewed through the same telescope, they showed up as relatively large disks of light. Did this mean that the newly-discovered dot of light was not a planet?

Dr. E. C. Slipher undertook an experiment to clarify this. Suppose the planet was very small in size. It might appear as a pinpoint. Dr. Slipher cut holes of different sizes in a cardboard box and placed a weak light inside the box. He then placed the box on a distant mesa, just north-east of Flagstaff. When he trained the 42-inch telescope on the box, he found that all the holes, small and large, looked like pinpoints. Later observations with even large telescopes did show a disk.

In 1950, the 200-inch Mount Palomar
(Continued on page 803)

Resources For The Third Plan

By Dr. P. R. BRAHAMANANDA

Reader in Monetary Economics, Bombay University

The Indian economic scene during the current months has been full of small and big excitements. Animated discussion is taking place on the implications of a number of important events. The National Development Council has broadly endorsed the Third Five-Year Plan.

There has been some controversy regarding the financial vs. physical effort-targets of the Plan. Unlike as at the time of the presentation of the Second Plan, though the Third Plan has commenced, the final Plan has as yet not been presented to the public.

A welcome augury is the offer of foreign aid by certain friendly powers for the first two years of the Plan. Thanks to the large P.L. 480 Agreement involving a sizeable aid commitment concerning foodgrains, a climate of security has been created in regard to the availability of food-grains during the entire period of the Third Plan. The announcement regarding the firm availability of foreign aid of about 2,225 million dollars for the first two years of the Plan has removed the uncertainty concerning the inflow of capital goods, government stores and raw materials.

Another aspect of the situation is the generation of reasonable hope concerning foreign aid for the latter three years of the Third Plan. Unlike as in the case of the Second Plan, the Third Plan has been launched with reasonable certainty regarding the quantum as well as the timing of external assistance over the Plan period. It may be remembered that the Second Plan was launched with a sizeable and uncovered gap in external and internal resources.

On the other hand, the climate of expectations regarding domestic resources is somewhat full of uncertainty. The success of the Third Five-Year Plan will depend upon large-scale mobilisation in domestic financial resources. This is true for both the public and the private sectors. The fulfilment of the financial commitment of the Third Plan implies a substantial step-up in the ratio of tax revenue to national income. This has to go up from the current figure of about 8.50 per cent to about 11.0 per cent in 1965-66. This implies a step-up in absolute tax receipts by about 50 per cent. Though some lead has been given in this

respect by the Central Government in the budget proposals for 1961-62 much yet remains to be done.

It is generally believed the State Governments have not done as well in respect of additional taxation as they should have. It is not often realised in this connection that the capacity of the State Governments to exploit the tax potential is rather limited. The resource-impact of additional agricultural taxation cannot be considered to be substantial. The State Governments were able to achieve whatever taxation targets they did during the Second Plan largely on account of additional revenue through sales taxes. The resistance in this respect was not so great inasmuch as prices in general were rising largely due to the high rate of expansion in money incomes witnessed during the period of the Second Plan.

Another aspect of the problem is the possibility of inter-State shifts in industry and business if any one State (or group of States) seeks to raise tax-rates at a higher rate than others. It is, therefore, necessary that some machinery should be devised by which the taxation programmes of different States are co-ordinated. It is hoped that the National Development Council might give greater attention to this problem during the period of the Third Five-Year Plan.

An important controversy that has emerged as an offshoot of the National Development Council's meeting concerns the current size and prospects of domestic savings. Students of economic development are aware that the household sector plays an important role in savings decision particularly in underdeveloped countries. As incomes rise, the households tend to utilise part of their savings either in the form of direct investments or make their resources available to financial intermediaries like banks, insurance companies, provident fund associations, investment trusts etc. The process of savings-formation and channelisation implies the development of a wide network of institutional agencies. The primary beneficiary in this respect in the initial stage is the banking system.

But gradually households prefer other intermediaries to banks. This in its turn implies a certain slackening in the rate of growth of deposits. However, in the initial

stages the ratio of bank deposits to national income would rise and at a fairly rapid rate. The gradual slackening in the rate of growth of deposits in its turn necessitates an increase in the extent of dependence of the banking system upon the central bank of the country.

However, an upward revision in trends concerning short-term interest rates is bound to have its effects upon the long-term interest rate too. During the period of the Second Plan, the borrowing policy of the Government was successful largely due to an exogenous factor, that is, the investment of P.L. 480 deposits in Government securities. During the period of the Third Plan the success of the borrowing programme of the Government would largely depend upon the ability and willingness of leading institutional investors like the insurance corporation, the banking systems, provident fund associations etc., to subscribe to Government loans.

The programme of financial mobilization implies that resources for both the public and the private sectors have to be obtained. The Plan will not succeed if needs of only one sector are met. It is not again possible to adopt divergent monetary policies in the two sectors. For example, it may not be prudent to persist in a policy of high interest borrowing for the private sector and of low interest borrowing in the public sector.

We have made above a slightly elaborate reference to certain aspects of financial mobilization because it is in the respect of savings that the plan may tend to manifest serious shortfalls. Available physical evidence regarding aggregate investment in 1960-61 indicates that it formed about 10 per cent of national income. At current prices it would have amounted to around Rs. 1,470 crores. In 1955-56 net investment was about 7.7 per cent of national income. At current prices it was about Rs. 780 crores. However in 1960-61, the external assistance counterpart of investment was nearly Rs. 300 crores. The amount would be increased still further included. Any way savings at current prices would be just about Rs. 1,100 crores in 1960-61 i.e. about 7.5 per cent of national income; more or less the same as it was in 1955-56. Thus there is sufficient aggregate evidence to warrant the hypothesis that during the Second Plan the Savings ratio has remained constant, or

at best showed only a moderate rise. That this should have been so in a period when money incomes expanded by nearly 45 per cent, money supply by nearly 33 per cent and prices by above 30 per cent is a serious cause of not merely academic concern. This implies that the step-up in investment obtained in the Second Plan was largely due to external factors reflected in the heavy import surplus.

During the Third Plan the ratio of investment to national income is to be stepped up to 14 per cent by 1965-66. This implies an investment of around Rs. 2,590 crores in 1965-66. Assuming foreign aid of around Rs. 600 crores, savings will have to be around Rs. 2,000 crores. This implies that savings in absolute terms will have to double during the Third Plan. How this is going to be achieved in the context of a moderate amount of deficit financing is going to be the chief headache of not merely planners but also economists and politicians as well. (Courtesy: 'AIR, Bombay')

Dr. Clyde W. Tombaugh—Planet Hunter

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reflector was used to compare the size of Pluto's image with a standard set of disks. This observation placed its diameter at 3,600 miles. (recently, it was found to be 4,900 miles.) Pluto's orbit was quickly computed, for once its location was known; it was found on plates dating back to 1915.

The discovery of Planet X was announced on March 13, 1930. The same date was the seventy-fifth anniversary of Percival Lowell's birth and the one-hundred-forty-ninth anniversary of the discovery of Uranus.

How was the new planet to be named? The final decision, suggested by an 11-year-old English girl, was to use a classical name, Pluto, in keeping with the names of the other planets. Pluto, moreover, was the mythical ruler of the underworld—the kingdom of darkness. The new world was so far from the sun (3,700,000 miles) that it, too, was a realm of darkness.

Dr. Tombaugh is now at the New Mexico State University Research Centre. Once again, he is searching the sky for an undiscovered heavenly body and has suggested that a number of very small, natural "moonlets" may be circling the Earth. Perhaps one day, Dr. Tombaugh will find "Satellite X."

MAKE YOUR MIND MORE EFFICIENT

By R. J. HEATHORN, B. Sc.

A person with an alert and efficient mind will show great awareness of the world around him, well-directed thought, ample will-power and controlled feelings.

He will propose sensible ends in life and he will go about achieving them in a rational, logical way.

Some minds are better than others, and the differences are seen in varying levels of intelligence. Intelligence cannot be increased, but everyone can learn to make better use of what he has. Many quite ordinary people have achieved mental eminence through having well-organised techniques for making best use of their powers.

Minds can improve in quality throughout life. The ability to follow a complicated argument or to learn new things improves with time. Some people, from their own experience, might deny this. But the deterioration which they notice in their own minds is caused solely by disuse.

Too many people give up serious thought or study when school days end. Their unused minds begin to lose their powers. Where the mind is kept fully active, however, its capabilities steadily increase as the years go by, tailing off only in old age.

Exactly the same thing is true of our minds, in fact, as is true of our physical bodies—that disuse leads to atrophy. Months spent in bed, for instance, cause the legs to become weak and their muscles to wither away. The mind suffers in the same way if not used.

What is more, nothing is wholly mental or wholly physical. Our mental state affects our bodies, and our bodily condition affects our minds. To make our minds efficient and alert, therefore, the first rule must be to ensure the maximum physical fitness. The normal rules for sensible living will ensure this. Avoid excesses, eat a sensible and varied diet, get plenty of exercise, fresh air and sleep.

The technique of relaxation should be studied, so that mind and body may operate in easy freedom, unhampered by anxiety and nervous tension—two of the main causes of mental tiredness. When the body is tense, the mind cannot work easily.

Thinking is hard work, which is why so few people ever attempt much of it. We must make ourselves think by deliberate

effort. Always have some study on the go: a language, history, the habits of bees, popular songs—what it is does not matter. Whatever your interests are, go into them wholeheartedly and actively so that what amuses you becomes a subject of study.

You will find that one thing leads to another. Interest in Elizabethan history might lead you to study the great battle with the Spanish Armada. From that you might find yourself studying the principle of ship construction, or navigation. That could lead on to mathematics and astronomy. Another person, with different interests, might start with Elizabethan history and be led on to changing fashions in clothing, in house building and in furniture.

Once you set out to be really immersed in what interests you, your mind will develop and lead you excitingly into all manner of unexpected directions. As you go you will stack up more and more knowledge and experience to help make your mind even more effective, more capable of dealing with new situations.

But your attention must be fully directed. Concentration is vital. Books and articles explaining methods of learning to concentrate should be studied and acted upon. Then as you follow your interests where they lead through life, you will find you are making the most of each point, preparing a proper basis for what is to follow.

Your mind will become more efficient if aided by wide, purposeful reading. Some light reading, of course, is desirable, since your mind deserves a holiday now and then. But the bulk of your reading should be closely related to whatever you are studying to your hobbies and to your aims in life. It will, in fact, be reading with an object.

The mind thrives on this kind of nourishment. Your memory also will improve as your knowledge grows. The mind cannot function efficiently without a good memory to supply it with the necessary material to work with. Look out for books and articles on memory training and follow their advice closely.

Another aspect of an efficient mind is a good imagination. In some ways this is more important than memory, since facts can be found in reference books, but no book can supply the vital spark of creative

imagination that makes original use of the material.

You can train your imagination by giving it work to do. When reading novels stop now and again to work out for yourself how the story might go on. Study people you see in buses and train and make up stories about them. Where do they work? What political opinions do they hold? What is their family life? What are their hobbies?

Another useful exercise is to try to imagine what it is like to be someone else, or even an animal. Try, for instance, to project yourself inside the cat curled up by the fire. Try to feel the warmth and to see the room as he sees it.

Mental growth comes largely from the sharing of ideas. For this reason conversation is important. Cultivate a wide circle of friends, seeking out people who are capable of conversing intelligently on a wide variety of subjects. Discuss current affairs with them, the books you and they are reading, the films and plays you have seen, the funny thing you saw in the town today.

All your experience in life, however trivial some of it may seem, can be made into useful and interesting conversation if you look into its full significance. This is where imagination comes in.

In drawing upon the minds of others in conversation, do not forget that you too must contribute your share. Form your own opinions, state them clearly, and avoid merely repeating those you have heard or have read in the newspapers.

An alert and efficient mind is independent, self-reliant and never fears to appear mistaken or even silly.

Thinking, conversing and all mental activity is carried out in words, so it is most important to attain a mastery of English. Improve your vocabulary, practise expressing yourself in speech and writing. Make frequent use of the dictionary.

A wide and varied experience of life is desirable. It provides the mind with more material to draw upon, and gives further insights into the workings of other minds.

In seeking fresh experiences, undertake new and difficult tasks. Find ways of taxing yourself. Your mind, like your body, works best under pressure. Do not allow it to become lazy.

An inefficient mind can be spotted by its faulty thinking. Emotions are allowed to colour the conclusions, prejudice interferes with the logic, there is a failure to take account of all the relevant facts.

Make allowance for the emotional overtones of words. Thus for example, "astute" creates a favourable impression, while "crafty" has the opposite effect. Either word might be applied to the same man, the first if we wish to praise him, the second to criticise.

The alert mind is on the look-out for the use of such words and modifies what it hears accordingly.

The ability to make full use of one's intelligence is most needed when conditions are changing. As fresh situations are faced, the old automatic reactions are often inadequate. The alert mind soon spots when this is happening. Adaptability is an important feature and it can be developed by seeking fresh fields to conquer, by taking care to avoid falling into a rut of routine.

The person of mature mind, responsive to the world around him, acting quickly and effectively, is emotionally stable. His interests are predominantly unselfish. He has an unwavering motivation to action, so that whatever he starts is worth starting and is seen through to the end.

Attention to the suggestions made here will give you the alert and efficient mind of the fully mature person.

(Courtesy: 'The Psychologist Magazine')

Here is good news for those to whom enthusiasm does not come naturally: It can be cultivated.

At first you must consciously put your eyes, your voice, your spirit—in a word, yourself—into your appreciation of people and events and things.

Do this around your home, at your work, and in your social contacts, and you will be surprised how quickly it will become second nature.

You will find yourself living in a more gracious and enthusiastic world, for your enthusiasm will be reflected back to you from the people to whom you give it.

—David Dunn

The human individual lives far within his limits. He possesses powers which he habitually fails to use.—William James

Atomic Garbage

By RITCHIE CALDER

Getting rid of atomic garbage is one of the world's greatest sanitary worries. The "garbage-men" who do the worrying are not those who come round and empty our ash-cans but the "top brains" of nuclear science and the leaders of public health everywhere, and the garbage which concerns them is the inescapable legacy of the splitting of the atom.

Most people are aware of this garbage in the shape of the fallout of atomic bomb tests which can pollute the air we breathe, the food we eat and the liquids we drink, constituting a threat not only to ourselves and our children but to unborn generations.

But scientific, as well as public, concern has transferred itself to the peaceful uses of atomic energy as well. It makes people nervous about having power reactors in their neighbourhood, or having nuclear-powered ships in their harbours, or nuclear-airliners flying overhead.

Yet, provided we do not have fallout on the scale which we once had, the present amount of atomic garbage, and its disposal, is an expensive item but not a dangerous one. The difficulties lie in the future when we may have atomic power stations everywhere. It has been estimated that by 2000 A.D. the amount of atomic waste, much of it highly dangerous, will be about 120 tons a day. Compare that with radium, the natural radioactive element, of which only 5 pounds existed in the whole world before the artificial splitting of the atom.

That is why conferences on waste disposal are becoming as frequent as Saints' Days. They bring together physicists, chemists, biologists, ecologists, geologists, oceanographers, meteorologists and astronomers. And at a colloquium which I attended some months ago at the University of Chicago, we had lawyers as well.

"Yes. . .but. . ."

They have discussed everything: Can you risk running atomic sewage, containing low-level, practically safe, radiation, into the sea, as the British do into the Irish Sea? By any careful measurement of the effects on the fish and seaweed and so forth, the answer would appear to be "Yes", but the ecologists—the scientists who study the balance of nature—have their doubts. No one

fully understands the food-cycle in the sea and the scientists are worried lest the radioactivity concentrated by lower organisms should eventually get into the sea-food we ourselves eat.

Can you dump high-level waste—dangerous, long-lived radioactive elements—into the depths of the ocean, and, if so, how deep? Six and a half miles (enough to drown Everest) seem safe enough. But it has been shown that, even in trenches that deep, the interchange between the bottom waters and the surface may take less than five years, so that long-lived radioactive elements could rise to the fishing levels. Then how about firing the atomic ashcans into Space, safely beyond our atmosphere? But what if the rocket fails and plummets back to earth?

The approved method of dealing with really dangerous wastes is to put them in stainless steel tanks. In these vast kettles the radioactive liquids go on boiling like a witch's brew with the heat which the elements themselves generate. In the United States, at the present time, there are 65 million gallons of atomic sewage bubbling in such cauldrons, and it costs $2\frac{1}{2}$ dollars per gallon to provide such storage. This adds up to \$162,500,000 and by any currency valuation it means that it has already cost more to bury the Living Atom than it cost to entomb the Dead Pharaohs in the Pyramids.

Multiply that figure several times in terms of the possible world production of waste in the next 50 years and, apart from the expense, you can imagine the vast "burial grounds" alienated from human use for ever. Yes, for ever! For example, plutonium which may exist in such waste has a half-life of 24,000 years. This means, that in that time half the number of present plutonium atoms will have split. In the 24,000 years beyond that, half of what remained will have split, and in the succeeding 24,000 years, half of the quarter, and so on.

Salt Mines and Sandwiches

People were beginning to despair of ever finding a reassuring answer. But at the University of Chicago colloquium Dr. E. G. Struxness, of the Health Physics Division of Oak Ridge National Laboratory, U.S.A., came up with several pretty con-

vincing proposals, mainly on underground burial. One was for using old oil wells. That, subject to many geological reservations, is possible. Even more so, is the use of the galleries of deep salt mines. In these, despite the generated heat, the disposal of solid wastes is of immediate practicability. Liquids are more difficult because of the chemical interaction with the salt, but with further research even that eventually may be feasible. And there are plenty of disused saltmines in the world.

The most ingenious method, however, is one which has been tried successfully at Oak Ridge—putting radioactive “jam” in a geological “sandwich”. Technically, it is called “hydraulic fracturing”.

The geologists established the structure of the underground formations at Oak Ridge and chose a thick shale stratum which conveniently (for the experiment) outcropped on a hill. The scientists then drilled down to 300 feet and fitted a tube, $3\frac{1}{2}$ inches in diameter. They mixed the liquid waste with portland cement and pumped the mixture down at a pressure of 300 lbs per square inch, and at a rate of 26,000 gallons an hour. After four hours pumping, the liquid came squirting out of the hillside.

This was experimentally very gratifying (although in eventual practice undesirable) because it showed that the pressure had fractured the shale along a horizontal face (like splitting a lump of coal) and that the liquid had spread over an area 200 feet wide and 400 feet long. Very delicate measurements showed that the mixture-under-pressure had lifted the ground a fraction of an inch.

When the radioactive concrete set, it formed a solid sheet an eighth of an inch thick securely sandwiched in an impermeable bed of shale. Even the earthquakes which have been known to occur in the area would not dangerously dislodge it.

Sites for Separation Plants

They sank another drilling to a depth of 1,500 feet into the same shale formation and successfully repeated the experiment. Then they filled up the tube half-way and injected the mixture at 750 feet, again successfully. This showed that the shale could be laterally fractured at any depth and that even dangerous radioactive wastes could be safely cemented into the ground.

This suggests that, in the future, similar rock formations should be chosen as the sites for nuclear separation plants, because it is in the chemical extraction of fissile fuels that the dangerous wastes are produced—not at the nuclear power-stations.

(UNESCO)

I know of no more encouraging fact than the unquestionable ability of man to elevate his life by conscious endeavour.

—Henry Thoreau

TEXTILE MACHINERY IN INDIA

The textile machinery industry in India is of very recent origin. Although the textile industry is over a century old, the manufacture of textile machinery in India on any appreciable scale started only during the Second World War.

A beginning was made with spinning ring frames and looms while carding engines and some other items were added later on.

The existing capacities can meet the requirement of a number of items of spinning, weaving and processing machinery such as carding engines, ring frames, looms and conventional types of processing machinery.

Fresh schemes for the manufacture of new items of machinery such as blow-room machinery, draw frames, speed frames, open width bleaching plant, pneumatic mangles, hot air stenters, mercerisers, polymerisers and sizing machines are under implementation.

With the implementation of these schemes, it is expected that the indigenous textile machinery manufacturing industry would be in a position to meet 75 to 80 per cent of the requirements of the industry within the next few years.

The production of cotton textile machinery during 1960 was worth Rs. 11 crores. The estimated production by 1965-66 based on schemes already approved is expected to be about Rs. 21 to 25 crores.

At present only one type of automatic loom is available in the country from indigenous sources.

The total average annual requirement by value of cotton textile machinery during the Third Plan period has been estimated at Rs. 25 to 30 crores.

JAPANESE WOMEN TODAY

By KATHLEEN COSTELLO

A new Unesco paperback, "The Changing Social Position of Women in Japan", by Takashi Koyama, brings together studies by Japanese specialists—mostly women—in the fields of labour, the family, the rural community, education, civic activities and public opinion.

Japan's New Constitution revolutionized the legal basis of Japanese new institutions. In this study, Mr. Koyama and his collaborators describe the sweeping reforms that gave women equal rights before the law and investigate the present relationship between legal and actual status.

On paper, the rights of Japanese women now compare favourably with those of any women in the world. At one bound the legal family unit passed from the patriarchal to the conjugal type, skipping entirely the intermediate marital structure sanctified in the West by the Code Napoleon. The study makes plain that it will take many years for Japan to absorb the psychological shock of this particular reform.

In contrast, the new rights of women to vote and to be elected to public office seem to have been taken in stride. In the 1958 elections to the House of Representatives, men and women exercised the right to vote in almost the same proportions, with 75.8 per cent of eligible males and 74.4 per cent of eligible females going to the polls. After the first post-war elections for the Diet, in 1946 and 1947, 8.4 per cent of members of the House of Representatives and 4 per cent of members of the House of Councillors were women. As for local bodies like Domestic Courts, prefectural, municipal and village Boards of Education, Eugenics Protection Committees and Civic Liberties Commissions, the number of women represented on them increases each year. In 1957, they held 21.5 per cent of Public and Child Welfare Commission posts.

The gap between principle and practice is much wider with regard to the Constitutional right to equal pay for equal work—guaranteed also by the Labour Standards Law of 1947. However, if women's wages are still discriminatory, they are slowly growing less so. The present ratio of men's wages to women's—3 to 4—compares favourably with the pre-war 6 to 3, or 6 to 2. Among government workers there is almost

no discriminatory treatment. But millions of women, particularly on farms, are still unpaid family workers.

As might be expected, it is inside the family that the conflict between old and new ideas is sharpest. Here men and women have to work out their own personal terms of adjustment—here they reject, accept or compromise with the new status of women as defined by law.

Changing Patterns in Family Life

In the past, every detail of traditional Japanese family life was ritually prescribed. As a result, Mr. Koyama is able to analyze changing patterns in very specific terms.

The Japanese wife always spoke of her husband as *shujin* (master). And legally, he was in fact the master of the patriarchal household. Studies show that the word, still used 50 per cent of the time; but many women now intentionally say, "my husband". When the husband addressed his wife he would call *Oi, oi* (Hey, Hey). This usage is rapidly vanishing, and the use of first names is spreading.

In the elaborate ritual governing meals, any choice food was offered first to the spirits of the ancestors, then to the patriarch and eldest son. Wife, daughters and other sons had to be content with poorer meals, which they ate after the patriarchal table had dined and wined. Only 14 per cent of adult Japanese grew up in families where food was shared equally. But now, 38 per cent of all families share alike. (Fifty per cent of farm families adhere to the old custom).

Bed-and-bath-times had their fixed etiquette, too. If the wife went to bed before the husband, she was called an "idle wife". In the morning, she had to get up first so that he would not see her looking dishevelled. The first bath was always for the husband. Although these priorities are still observed in rural areas, they are becoming obsolete in urban families, which now pay more attention to convenience than to custom.

The change in attitudes is also illustrated by an innovation in sharing domestic responsibility. Before the war, it was unheard of—or, if heard of, was shameful—

for a man to help his wife with the housework. But only a few years after the war, a survey showed less than half of all Japanese still unconditionally disapproving.

Choosing a Marriage Partner

All these are improvements in woman's position after marriage. But what is the situation with regard to the method of choosing a marriage partner? Article 24 of the new Constitution says: "Marriage shall be based only on the mutual consent of both sexes. . ." But 1955 Ministry of Labour figures show that while 63 out of 100 Japanese thought that, "one's own choice of a spouse" is better than the "parents' choice", only 27 per cent of women replied that they, themselves, would dare to oppose their parents' wishes. And a 1957 table indicates that 73 per cent of marriages in large cities were still *miai* (arranged) marriages.

Mr. Koyama, however, comments: "Among young people the old procedure is rapidly succumbing to the new notion of marriage which regards a man and a woman as constituting the basis of marriage. In conjunction with the change in legal and moral norms, reform of actual marriage practices is expected to take place in the near future."

On the whole, the statistics assembled in "The Changing Social Position of Women in Japan" describe a trend, not a landslide. It cannot be said, and Mr. Koyama makes no effort to do so, that the last 15 years have effected a radical transformation of the Japanese woman's life. The impression given by this study is of creeping rather than dramatic change.

Education: The Keynote of Progress

But there is one exception. Equal education for children of both sexes became not only a legally recognized right, but a fact. Article 5 of the 1946 Fundamental Law of Education states: "Man and woman shall respect and co-operate with each other. Co-education shall be recognized." The provisions of this law were put into effect with incredible speed.

Compulsory education was extended from six to nine years for all children; and in a country where boys and girls had been separated after the third grade, co-education was also made compulsory for the whole period. Before passage of this law girls'

secondary schools existed only to make "good wives and mothers" for middle and upper-class families. After the sixth grade, no effort was made to provide either a curriculum or level of teaching in any way comparable to what was offered to boys. Girl graduates of this system were equally unqualified for higher education and gainful employment.

Acceptance of women's right to equal education shows up strikingly in figures for enrolment after the compulsory nine years. Taking 1950 as a base year, the index of high school enrolment for girls had climbed to 173.9 in 1957 (as compared to 134.7 for boys) and to 284.7 for women in colleges (as compared to 144.3 for men). Actual enrolment for senior high schools: 1,203,749 boys, 733,766 girls. for colleges and universities: 364,642 boys, 40,668 girls. In the same year, of the 51.2 per cent of female college graduates who were employed, 63.6 per cent were professional and 27.9 per cent clerical workers.

This movement of women into positions that command social respect is a post-war phenomenon almost entirely attributable to the introduction of equal education. The author feels that this development, "will be likely to modify considerably the past tendency to belittle working women and will contribute towards the enhancement of women's position."

The graduates of the new co-educational system of education still constitute a minority of the population of Japan. But there are already enough to make them an important leaven in Japanese attitudes. In this basic minority lies the promise of a happier, fuller life for the generation of women now growing up. (UNESCO)

Take the attitude that all attitudes—all feelings—of unhappiness are false and that all attitudes of happiness are true and you will be amazed at the steady improvement of your happiness-level.—Vernon Howard

* * *

What you think, what you have been thinking over a long period of time, what you are going to think in the days ahead will determine precisely what you are and the kind of world you live in. What you think determines what you become.

—Dr. Norman Vincent Peale

What are the books that have influenced me? This question was put to me some fourteen years ago and I then answered it as well as I could. Now that I think it over, I find myself too small truthfully to tackle this question. It is only very great and good men that have been **influenced** by good books. Others may pretend or delude themselves that they have followed the maxims of saints. Our hearts are hard and the words of great and good men fall like seed on barren soil. I hesitate therefore to answer this question. One may have admired some great books, one may have been greatly impressed by some writings. But did that admiration or impression become a real influence? Many have read, admired and been greatly impressed by the

Bhagavad Gita. But how many of them have been influenced by Sri Krishna's teaching? If any one claims it, he is a saint, or a hypocrite, or a superficial pedant. Subject however to this confession of incompetence, I shall say something about the books which may be said to have given a push or momentum to my life-course.

The books that may be taken to have influenced me are not what I read upon direction or advice but what by accident I came upon.

I found Thoreau's **Duty of Disobedience** on the table of a friend to whose house I went to spend some time chatting. I picked it up from a heap of miscellaneous papers—my friend was a fellow-lawyer with good practice—and found therein what enlarged later into something like a life-programme.

I went to prison once with a very restricted number of books of which one was a copy of **Robinson Crusoe**. Luckily I had not been forced to read this as a school text-book when I was a boy and was therefore enabled, when I was forty, to find in it not a stale children's story-book, but religious inspiration of permanent value.

Another small but great book that I chanced to read merely by accident was **The Trial and Death of Socrates**. It has shaped me as nothing else has done.

A fourth book that affected me as deeply as Socrates was John Stuart Mill's **Liberty**. The unqualified attachment to truth as such is what was impressed on me in both these philosophers.

Lastly I must mention **Marcus Aurelius's Meditations** than which I have found no greater solace in hours of grief or when beset by evil.

May I add by way of caution that it is not English books that made me whatever I am. It is the stories my mother and two aunts of mine amused me with that built me up. (C. Rajagopalachari)

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CORRESPONDENCE SCHOOL OF BRISBANE

Indian Colombo Plan students enrolled for courses with the Technical Correspondence School in Brisbane (Australia) are maintaining a high standard.

The school operates with a staff of 27 full-time and 88 part-time instructors and

prepares lessons, answers queries, corrects test papers and posts them for more than 200 pupils scattered over 11 South and South-East Asian countries.

One of India's outstanding students enrolled with the correspondence school is Nilkanth Govind Sarnaik, of Thana District.

His test papers for the electrical course he is doing averaged over 90 percent with some of 100 percent.

Shri B.M. Shelke, of the Sheep Breeding Station, Mahud Taluka-Sangola District, Sholapur, also is doing well in his sheep breeding course with the school. Four test papers so far this year have attained 95 percent, 95 percent 100 percent and 90 percent.

Another top Indian student, is Lachhi Ram Sah, of the Indian Veterinary Research Institute, Izatnagar, Bareilly.

The school supervisors, Mr. R. Turner, announcing examination results recently, said: "Examination and test results of our pupils from South-East Asia are most encouraging. Generally they are keen, eager to learn and hard workers. Despite the language difficulties, many of them have attained honours passes."

Mr. Turner said that the steadily increasing enrolments showed that there was a "Great interest" in the school from South East Asia.

Most of the school's 5500 pupils, however, come from Queensland country areas.

Under the Colombo Plan, pupils in the 11 South-East Asian countries are given a wide choice of courses in trade and agricultural subjects.

These include the science of animal life, poultry farming, soil conservation, pastures and pastures management; agricultural mechanics; dairy cattle raising; the science of soils; moulding refrigeration; cabinet making; house painting; fitting and turning; radio mechanics; blacksmithing motor mechanics; letterpress machining; electrical fitting; carpentry and joining.

The school offers a total of about 300 correspondence courses. All courses are prepared in English and the Colombo Plan students are treated in exactly the same way as the Australian students, receiving the same instruction papers and sitting for the same examinations.

Each student, in Australia or overseas, receives a "personalised" service from his teachers who answer all questions sent by his pupils and writes individual letters to each.

At present, Ceylon has 69 students on the school's rolls, Malaya 49, India 29, Burma 17, North Borneo 16, Philippines 15, Sarawak 3, Indonesia 3, Singapore 3, Brunei 1.

Thailand was represented for the first time this year when one student enrolled for a course in animal and plant life.

One interesting sidelight to the correspondence scheme is the number of Christmas cards and souvenirs that the school receives each year from appreciative overseas students.

"Even though we have never met we feel that these students are our close friends", Mr. Turner said.

(Those interested in training by correspondence may write for details to the Australian High Commissioner at New Delhi—Ed. C. and C.)

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‘SHALL’ OR ‘WILL’?

Often when we come across pairs of words such as **shall** or **will**, we find ourselves at a loss as to know exactly which one to use when we are speaking or writing in the future tense.

"Dr. Syntax", referring to this question in **World's Press News** writes:

"The first simple rule about the auxiliaries used to form the future tense is that **shall** is used for the first person, and **will** is used for the second and third persons. So we say 'We shall start tomorrow' and 'I shall be glad to see her' and 'They will soon be here.' This applies also when the subject of the verb is not pronoun, of course: "England expects that every man will do his duty" ('every man' is third person).

"This is all right when we are expressing the plain future. But when other meanings are intended the use of the auxiliaries alters. For instance, after a clause starting with **that** which expresses intention, desire, demand or anxiety we use **shall** for all three persons. Thus we say: 'I intend that ~~she shall go~~' — 'He desires that you shall go in now' — 'I demand that you shall leave me' — 'He is anxious that they shall not ~~escape~~' — 'You shall hear me!'

"After a **that**-clause expressing hope, anticipation or expectation we use **will** for all three persons: 'We hope that tomorrow will be fine'—'He does not anticipate that we will resist'—'He expects that I will come tomorrow'."

The dividing line between the two verbs is a fine one and "Dr. Syntax", concedes that at times it is difficult for even the most experienced and knowledgeable writers to choose between these subtle alternatives. He then concludes his article:

"We say 'We shall look into the matter' and express a simple future plan or intention. But we may say, equally correctly, 'We will look into the matter' and so express with rather more emphasis our firm intention or purpose.

"The most notable use of **will** with the first person, expressing purpose or intention, is in the Marriage Service."

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CAREFUL—DON'T SAY TOO MUCH

Tautology is the unnecessary repetition of the same idea in a sentence, usually in different words, such as "Come at once immediately" and "He is dumb and cannot speak".

These are obvious examples of this common fault of style, but there are many others which are regrettably common and have become clichés. It is pointless to say "That is past history", because history is always past and this adjective adds nothing to the sentence. A **fact** is by definition a **truth**, so to speak of **true facts** is also superfluous. A **pair of twins** refers to four people and should not be used to describe two of a kind. **Gathered together** and **repeat again** are instances in which the duplicated idea is evident.

A thing cannot be **more perfect**, because it is impossible to improve upon perfection. Nothing can be **most unique**, because this word means the **only one of a kind** and cannot be compared.

Favourite, too, has superlative force, so **most favourite** is wrong. And, of course, we never say **more better**, **most highest**, etc.

In spite of this, there are a few cases which have won the battle for respectability and have become accepted into the language as idiomatic expressions, often because of their alliterative sound. We say **shiver and shake**; **twist and turn**; **weep and**

will; pick and choose; pray and beseech; sure and certain.

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GUIDE TO CAREERS: THE LINE MAN

Most of us have seen near the railway lines or along our highways, poles at regular intervals carrying a large number of wires. These are telegraph or telephone wires which link the remotest parts of the country. Besides we have also seen other types of lines which supply electric power to houses, factories and farms.

We shall now discuss the career of the Lineman who lays these lines on telephone, telegraph and other electric poles or towers.

The Lineman erects, maintains and repairs telegraph and telephone or electric lines. He is assisted in his tasks by a gang of Line Mates and Mazdoors. He supervises the digging of earth done by the mazdoors for fixing the poles or towers along the route already surveyed and marked by an engineer. He determines the depth of the holes to be dug, and ensures that the poles are fixed safely. He climbs the poles, secures himself on them by means of a safety belt, fixes brackets and insulators, strings wires from pole to pole and connects them with different lines. Tools, materials and accessories required for the work are constantly supplied to him from below by his assistants. This is how the Lineman erects a new line.

When a line is in service the Lineman is busy with maintenance duties. He patrols the line regularly and replaces defective materials and fittings if any, in good time. Severe winds and storms sometimes dislocate the lines and uproot the poles. On receipt of information from the subscribers or consumers the Lineman quickly moves to the spot with his gang and rectifies the defects. He splices and solders broken wires, replaces broken insulators and fittings, fixes up the stays and struts and sets the line to work. In addition to repairs to the line, the Lineman has to attend the subscribers' or consumers' calls for repairs to telephone instruments switches or cutouts. He maintains a register of the daily breakdowns and calls and also of the tools and tackles which are kept in his custody.

A Lineman employed in the P. and T. Department has also to install telephones and protective devices. He has to be able

to layout neatly internal fittings and insulated wires. He is also required to do concealed wiring in conduits (pipes) and is to be conversant with this job. After installation of equipment he has also to carry out periodical maintenance work for the efficient functioning of the lines.

The lineman has, more often than not, to work outdoors in all seasons. He has to work at odd hours of the day and night. His place of work is usually in busy streets, congested bazars or in desolate places out of town, sometimes far away from his residence.

PERSONAL QUALITIES necessary for the job are physical strength and agility; mobility of legs, hands and fingers, and manual dexterity. The Lineman should have good eyesight. He should have a sense of balance to avoid falls from poles or ladders. He must have ability for team work. It is also essential for him to be extremely careful in his work. He must be courteous in his manners and dealings with the subscribers and consumers and with the public in general.

THE WAY TO QUALIFY for the job is to get on-the-job training. A young man with elementary education who wishes to become a Lineman should start as a line mazdoor, either through the Employment Exchanges or as a casual labourer from the open market. As a mazdoor, he has to help the Lineman in his work, as a member of his team. He learns how to run out and "string" wires, how to dig earth, how to find faults with the lines, and how to make minor repairs. He also learns the names of the various tools and tackle and their uses. After a year's satisfactory service he may be promoted as a Head-mazdoor or Mate. A Head Mazdoor heads a party of 7 to 10 mazdoors and is responsible for the output of the mazdoors under him, and for the materials carried by them. A Head Mazdoor may be promoted as an Assistant Lineman or Lineman according to skill and ability on passing a departmental test in the following subjects:

- (1) Knowledge of simple arithmetic, ability to read and write in any language.
- (2) Ability to climb poles and work usually at a height of 16 feet above ground.
- (3) Knowledge of jointing, cutting and binding of wires and cables, etc.

On passing the test he is attached to a

Sub-Inspector or Head Mistry for further training as required.

In an Electric Supply undertaking, while considering promotion to the post of Lineman or Assistant Lineman, preference is given to those who pass the Workman's Permit Examinations in Part IV and VI, conducted by the Licensing Board in different States.

The Craftsman Training Scheme of the D.G.R.&E. also provides training in the trade of "Lineman and Wiremen".

OPENINGS are available in the Posts and Telegraphs Department, Railways, Municipal Corporations and Electric Supply Undertakings.

PROSPECTS of further promotion to posts of Head Mistries, Sub-Inspectors, Foremen, Mechanics, and Telephone Inspectors exist for efficient Linemen who are Matriculates, and have three-to-five years experience as Linemen or who are otherwise well qualified.

EMPLOYMENT OUTLOOK: The industry relating to generation, transmission and distribution of electricity, is growing very rapidly. Hydro-electric, thermal and diesel power stations are being installed throughout the country to feed different industries in public and private sectors. Network of transmission and distribution lines have been erected and some big projects are in hand to supply power to industry and traction. Rural electrification also plays a very important part in the development of electricity in the country. At the end of the Second Five Year Plan, India should have a total of approximately 18,000 electrified towns and villages as against 7,400 towns and villages at the end of First Five Year Plan.

Considerable expansion of communication facilities has been undertaken during the Second Plan period. The programme provides for the installation of 1,80,000 telephones, involving the setting of work 1,60,000 exchange lines, and the opening of a number of new exchanges. A number of existing manual exchanges will be automated by the end of the present plan period. One thousand and two hundred Public Call Offices are scheduled to be established. A scheme for the opening of 1,400 telegraph offices, and the introduction of a number of technical improvements with a view to the modernisation of the telegraph system, is also a part of the programme.

All these programmes involve the construction of numerous new lines with increase in the volume of maintenance work.

A large number of Linemen are, therefore, required for the execution of the programme for Development of Communications and Power.

FURTHER INFORMATION may be available from:—

- (1) Chief Engineers of Telephone and Railways.
 - (2) Chief Engineers of different State Electricity Boards.
 - (3) Electrical Engineers of Supply Stations.
 - (4) Chief Electrical Engineers of Railways.
 - (5) Employment Exchanges.
- (Courtesy: 'Union Ministry of L. & E.')

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FORTHCOMING EXAMINATION

Stenographers' Examination 1962

The Union Public Service Commission will hold at various places, an examination sometime in February/March, 1962, for recruitment to temporary vacancies in the Central Secretariat Stenographers' Service—Grade II (Combined), Railway Board Secretariat Stenographers' Service—Grade II (Combined), Indian Foreign Service (Branch B)—Grade II (Stenographers' Subcadre) and in posts of Stenographer in the attached offices of the Government of India, not participating in the Central Secretariat Stenographers' Service Scheme/Office of the Election Commission.

Age Limits on 1-7-1961: 18-24 years.

Qualifications: Matriculation or equivalent.

Full particulars and application forms obtainable from the Secretary, Union Public Service Commission, Dholpur House, D.H.Q.P.O., New Delhi-11, by remitting Re. 1.00 by money order or on cash payment at the counter. A candidate must clearly state on money order coupon "Stenographers' Examination, 1962" and also give his name and full postal address in block letters. Postal Orders or cheques or currency notes will not be accepted in lieu of money orders. Completed applications must reach the Union Public Service Commission by 18th September, 1961 (3rd October, 1961, in case of candidates residing abroad).

EDUCATIONAL FORUM



PROMOTION OF ADULT LITERACY IN THIRD PLAN

The urgent need for stepping up programmes of adult literacy during the Third Five Year Plan was emphasized by Shri Prem Kirpal, Union Education Secretary, while delivering at the National Fundamental Education Centre the valedictory address for the sixth batch of District Officers in charge of social education, in New Delhi on July 12, 1961.

Shri Kirpal said that during the last decade literacy had increased only from about 17 to about 24 per cent, the percentage for men and women being 34 and 13 respectively at present. With the introduction of the Panchayat Raj and the role allotted to community action for the fulfilment of the plans, it was imperative that as many as possible of the 330 million illiterate population of whom about 200 millions are in the age group 14-40, should be covered by literacy drives.

The Union Education Secretary said that while it was true that the funds available for this colossal task were inadequate, a great deal could be accomplished by the effective use of available manpower, better coordination and a kind of crusading spirit by the people responsible for social education at the district and block levels.

"The chief obstacle in the implementation of such activities as literacy drives", said Shri Kirpal, "is not so much the lack of financial resources as the prevalence of a sense of inertia and defeatism resulting from loss of faith and idealism. It should be one of the most important objectives of Social Education to create a dynamic will for change and burning faith in the fulfilment of the national tasks and policies embodied in the Five Year Plans."

NATIONAL DISCIPLINE SCHEME

The first batch of about 600 Instructors trained at the Central Training Institute of National Discipline Scheme passed out on May 31 at a simple and solemn ceremony held at Sariska near Alwar. The Instructors who completed their 8-month training in various aspects of the National Discipline

Scheme came from 8 States—Maharashtra, Gujarat, Punjab, Jammu and Kashmir, Bengal, Madhya Pradesh, Rajasthan and Delhi. These trainees will now be posted to their respective States and 3 lakh young boys and girls will be put under their care for training between the age group 9 to 15, thus bringing the total number of students under the Scheme to 9 lakhs. The total number of schools covered by the Scheme will be 1,400 in various States. During the training period, prominent persons from various parts of India and abroad, visited the Institute and lauded the effort of the Government of India in imparting all-round training to students in the National Discipline.

The Central Training Institute at Sariska was established in October 1960 by the Union Ministry of Education to train Instructors for the National Discipline Scheme. Set up amidst the picturesque surroundings in the Aravalli ranges abounding in natural scenic beauty, the Institute provides all essential facilities for training to young boys and girls. The training period is normally of 8 months' duration. All-round training is imparted in the principles and techniques of the National Discipline Scheme.

The minimum educational standard required for admission at the Institute is Matric but preference is normally given to higher and better qualified candidates.

EXPANSION OF TECHNICAL EDUCATION DURING THIRD PLAN

Establishment of 19 additional engineering colleges and 67 additional polytechnics and expansion of the capacity of the existing technical institutions in the country was approved by the All India Council for Technical Education at its annual meeting in New Delhi. With the establishment of these new institutions, the annual admission capacity of technical institutions will increase to 19130 students for degree courses and 37390 students for diploma courses by the end of the Plan period. The All India Council also approved a scheme for the establishment of a Central Institute of

Printing Technology for the training of senior supervisory and managerial personnel for the printing industry as also various measures for a qualitative improvement of the standards of technical education in the country.

Of the new Colleges proposed, seven institutions will be established as Centrally sponsored Regional Engineering Colleges in the States of Gujarat, Kerala, Madras, Orissa, Punjab, Rajasthan and Assam. A new College of Engineering and Technology started functioning this year in Delhi with the assistance provided by Federation of British Industries and the U.K. Government. A Regional College sanctioned during the Second Plan period, established at Allahabad, started functioning in August. The rest 10 Engineering Colleges will be in the States' Sector for which provision has been made in the Plans of State Governments. The 67 additional Polytechnics proposed will be established in different States according to a plan prepared in consultation with the Planning Commission and the State Governments. By the end of the Third Plan period, every State will have a Regional Engineering College. It is proposed to secure assistance from foreign countries in the establishment and development of the Central Institute of Printing Technology.

CORRESPONDENCE COURSES FOR COLLEGIATE EDUCATION

Correspondence courses at the Collegiate level will commence for the first time in India by January 1, 1962 with the inauguration of the scheme by the University of Delhi. This decision was taken at a recent meeting of the Expert Committee appointed by the Government of India. The details of the Delhi Correspondence Scheme will be gone into by a sub-committee of the Expert Committee. The Expert Committee decided that a Unit under the correspondence scheme should cater for 1,000 students and that provision should be made for 25 instructors for each Unit. The Committee Members were of the view that there should be three written examinations, one at the end of each year.

SAINIK SCHOOL AT KARNAL

A Sainik School in Karnal in Punjab was opened on July 24 by the Defence Minister, Shri Krishna Menon. The School has two hundred boys on its rolls. Shri

Krishna Menon said that Sainik Schools were not exclusive institutions catering to a small section of the community; they were open to people from all parts of the country irrespective of caste, class or geographical distinctions. Their purpose was to give preparatory training of the youth to enter the National Defence Academy. But more than giving a military bias, these Sainik Schools would train youngmen in the art of living together and teach them a sense of fellowship and team-work.

TRAINING IN BUSINESS ADMINISTRATION

The Special Committee for Commerce Education, under the Chairmanship of Dr. V. K. R. V. Rao, which submitted its Report in New Delhi on July 5, 1961 to Prof. Humayun Kabir, Union Minister of Scientific Research and Cultural Affairs, and Chairman of the All-India Council for Technical Education, has emphasised the desirability of providing short-term courses in business administration for middle executives.

These courses, the report points out, should be residential in character and be conducted for four to six weeks. Courses could be organised either directly by universities or by academic institutions having a university atmosphere, in consultation with the Board of Management Studies of the All-India Council for Technical Education.

The members of the Special Committee point out that the Staff College in Hyderabad looks after the needs of the top executives while the proposed M.B.A. (Master in Business Administration) Course would look after the needs of fresh graduates to the management cadres. They add that there is at present no provision for giving the required opportunities of syndicate, seminar and intensive discussion on problems of management for the middle executives. The part-time diploma courses cannot fill this gap as they are run over three years and are really intended for the benefit of the junior executives and other lower rung employees capable of entering the executive ladder.

The Special Committee members recommend that business administration should be treated as a separate discipline and be allowed to develop in the university but with sufficient freedom and flexibility.

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

INDIAN BOY ON ARCTIC EXPEDITION

Nineteen-year-old Charanjeet Singh, of Delhi, is one of five "guest explorers" on a 68-strong British schoolboys' expedition to the Arctic, which sailed from Newcastle, England, on July 27, 1961.

The boys taking part are aged between 17 and 20, and have been chosen from public and grammar schools and from industry.

Their main task, under the leadership of experienced British mountaineer and explorer Dr. John Payne, will be to search the Blaamanseisen glacier in the far north of Norway in an attempt to find an uncharted mountain lake, which is thought to be two miles long and completely landlocked.

Charanjeet Singh, the son of an Indian Army officer, is at present working as an apprentice Electrical Engineer in Britain with Associated Electrical Industries Ltd. He went to Britain in 1957, when his father was with the Military Attache at India House. He has represented India on Commonwealth youth-movement organizations, and has previously made trips with youth organizations to Gibraltar and Canada. He is also a leader with the Kingfisher Youth Club at Willesden, London.

The other "guest explorers" who took part in the expedition were from Southern Rhodesia, Sweden (two), and Norway. They are accompanied by 12 adults, including members of the staff of the Natural History Museum in London and an Air Ministry meteorological officer.

The expedition, which is away for about seven weeks, will travel by steamer, coach, rail, and foot inside the Arctic Circle to the base camp on the remote shores of Lake Sulitjelma, in Norway.

Expeditions are organized each year by the British Schools Exploring Society, and each year there are "guest explorers" from overseas countries. This is the second time India has been represented.

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DEO TIBBA CLIMBED BY BRITISH EXPEDITION

According to a message received in New Delhi, the seven-man British Derbyshire Expedition climbed the 19,661-foot-high Deo Tibba peak in the Punjab Himalayas on June 20, 1961.

The expedition was led by Mr. Robert Pettigrew. Two of its members, Mr. Derrick Burquess and Mr. Dennis Gray, accompanied by Sherpa Ladek Wangyal, reached the summit at 7 p.m. on June 20.

Deo Tibba was climbed by an all-woman Japanese Expedition in September, 1960.

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WORLD-THEATRE DAY

A World Theatre Day is to be celebrated each year, starting in 1962, following a decision taken by delegates attending the Ninth Congress of the International Theatre Institute which took place at Vienna early in June, under Unesco's auspices. The Day will coincide with the opening, in Paris, of the annual season at the Theatre of the Nations.

The Congress in Vienna also adopted a Greek proposal to hold an international symposium on dramatic art, with particular reference to "the performing-arts as a social and cultural phenomenon" and to "theatre for mass audiences." The meeting will take place next year during the annual Epidaurus festival.

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"ONDAS" PRIZES FOR RADIO AND TELEVISION

Personnel working in radio and television stations in any country are invited to compete for the annual "Ondas" Prizes, offered by the review of this name published in Barcelona, Spain.

Competitors may enter for the following categories: speaker, actor, programme director, or producers of scientific, cultural, theatrical, variety, news or children's programmes. An extra prize of 50,000 pesetas is offered for the best radio story.

As in previous years, awards will be

made on November 14, anniversary of the inauguration of the first Spanish transmitting station, Radio Barcelona.

Prizewinners will be invited to visit Barcelona where a folklore record fair and a radio-television exhibition will be held during the prize-giving week.

INTERNATIONAL PRIZE FOR WORK ON INDUSTRIAL MEDICINE

The "Nicolo Castellino" Foundation in Rome is offering a prize of 1,000,000 Italian lire in an international contest for a scientific work on industrial medicine. The contest, open to competitors of all nationalities, was created in memory of Prof. Nicolo Castellino, an Italian doctor renowned for his work in this field.

Authors submitting works must not be members of a University Faculty and should be less than 40 years of age on December 31, 1962, closing date for the contest. Type-written texts (in seven copies) should be sent in any one of the following languages—English, French, German, Italian, Portuguese or Spanish—to the Secretariat of the Foundation, c/o INAIL, Via IV Novembre 144, Rome.

The prizewinning text will be published by the Nicolo Castellino Foundation.

JUMPING RECORD IMPROVED

A world record in precision night-time parachute jumping has been set up by world record holder and USSR absolute champion, Peter Astrovsky, according to a Tass report from Vladimir on July 29, 1961.

His results are: In the first jump he deviated 19 centimetres from the centre of the circle and in the second jump—0 centimetres. The average deviation in the two jumps amounts to 9.5 centimetres.

Such a high result has been achieved for the first time in the history of world parachute sports.

MONUMENTS TO BE MADE "LIVE"

The Union Ministry of Scientific Research and Cultural Affairs has invited two French experts to examine historical monuments in this country with a view to introducing the French system of making them "live".

In France, tape-recordings of voices of the kings and people and music of their times are played when tourists enter old

palaces and other historical buildings. This is said to have added to their value as tourist attractions and it is felt that the system could be profitably introduced here as well.

The first historical building in which the system is likely to be introduced is the Red Fort in Delhi as, it is felt, its background would be ideal for an experiment of this kind.

WORLD'S SMALLEST VIOLIN

The Tokyo Music-lovers Association has offered a miniature violin weighing only 0.4 grams and reputedly the smallest in the world, to the Tchaikovsky Museum in Kline, in tribute to the great Russian composer, the Moscow newspaper "Leninskoe Znamia" said on May 14, 1961.

The tiny instrument is the work of miniaturist Tadao Ikegai, who took three months to make it.

The violin, soon to arrive at the museum, is 36 millimetres long, 13 millimetres wide and 2.5 millimetres deep, with walls 0.1 millimetres thick. It comes equipped with a miniature bow weighing 0.1 gram.

THE BIGGEST EVER EXPLOSION

Ever since gunpowder was discovered bigger and better bangs have been produced, culminating in the frightful explosions of atomic bombs. Yet the biggest bang ever known was not caused by men. It was the result of nature at work.

On August 27, 1883, the island volcano of Krakatoa, which is off the coast of Java, after a series of minor eruptions lasting since the previous May, exploded in a series of colossal detonations. So stupendous were these, two-thirds of the island was blown away. Where mountains over 1,000 feet high had been there was now sea water over 100 feet deep. Several thousand acres of land were actually wiped out.

The noise of the explosions was so great it was heard about 3,000 miles away in Rodriguez Island and in Australia over 2,000 miles distant. A hundred miles away, in Java, the blast was strong enough to damage walls and windows.

The noise of this biggest of all bangs was possibly the least effect, however. The disturbance caused in the sea had tragic results. Although Krakatoa is uninhabited, the deathroll resulting from its eruption

was the worst ever recorded from volcanic activity.

The terrible explosions sent enormous waves pounding the coasts of Java, Sumatra and nearby islands, causing great damage to property and killing some 36,000 people. At one place it was reported a ship was found stranded 30 feet above sea level two miles inland, carried there, evidently, by the waves from Krakatoa!

The volcano erupted vast quantities of matter, including a great amount of pumice so full of holes it floated on the sea, forming islands which covered miles of the ocean surface. Some of this pumice actually drifted as far as St. Paul, a island in the Indian Ocean over 3,500 miles away.

Perhaps the most outstanding effect was caused by the dust ejected. So terrific were the explosions, a huge column of black dust was flung 20 miles into the sky. The whole island was hidden from view by the black pall. A hundred miles away in Batavia, people had to use lamps at mid-day, and the darkness caused by the cloud extended some 50 miles further.

Some idea of the dust flung into the atmosphere can be gained from the fact that the decks of ships in the vicinity were covered by it to a depth of 18 inches.

The dust spread through the upper atmosphere over vast areas of the world, causing strange and lovely colours to appear in the sky. Even in Britain, 9,000 miles away from Krakatoa, gorgeous sunsets were seen. This dust took two years to disperse or settle.

Krakatoa was not only the biggest bang ever known, it gave the world the finest display any 'firework' has ever done.

(B. Sears)

WHEN IT SNOWS RED

Some people will laugh at the idea of the roseate hues observed on the snowy Alps being due to anything but sunrise or sunset effects. Do not travellers know these well? Have not poets striven to describe them in verse? True enough, but not the whole truth. There are times when the flush upon the mountain snows, instead of being a passing effect, remains stationary, with no condition of the sky to account for it, and the cause of this phenomenon was for a length of time a puzzle.

That the sky occasionally rained blood was indeed an old notion of what may be

called the fabulous ages of natural history; but as men's minds awoke further and further to the necessity of strict investigation, this delusion, among others, passed away. But it was still considered as a fall, though a fall of red snow instead of blood, its coming down red from the skies being a fact taken for granted.

There are numerous records consequently of red snow showers—one which fell on the Italian Alps and on the Apennines in March 1808 covering the whole country round in one night to a depth of several inches, with a rose-coloured snow.

But about these falls there were two noticeable facts—one that they always took place early in the spring, the other that they always fell in the night—in other words, that nobody ever saw them fall, this being accounted for by the fact that no such falls ever took place. Whence then came the appearances?

The explanation is as follows: Red snow is caused by a microscopic fresh water alga which vegetates just below the surface of the snow. This tiny organism—only one thousandth part of an inch in diameter—is a transparent colourless cell or sac filled with red colouring matter, which, of course, shines through. When this matter, or endochrome, is at a maturity, or ripe, it separates into four or eight portions, each of which grows a transparent cell for itself like the first. These are young plants, and they go on growing until the parent cell can hold them no longer, but bursts, and lets them out, each to begin a similar process of life for itself, the young cells outgrowing and bursting from their old home. Thus the multiplication of this mite of a plant goes on at such an enormous rate that it constantly spreads over miles of snow in masses sufficiently thick to be visible at great distances, colouring ever far off mountain sides "celestial rosy red."

It is always safe to learn, even from our enemies seldom safe to venture to instruct, even our friends.—C. V. Colton

Good is not good, where better is expected.—Thomas Fuller

I look on that man as happy, who, when there is question of success, looks into his work for a reply.—Emerson

Readers' VIEWS

WHITHER GOEST INDIA. . . ?

Sir,

Post-independence India has registered an unconscionable progress in almost every lineament of national reconstruction. But much ruefully a far more preponderant debasement has crept in in the morals of the nation. And that, in a way, deciphers all the advance mounted in a short span of fourteen years. Wherever one goes, it is almost fatally choking to breathe freely for the atmosphere is plagued with an all-round corruption. A plethora of vile practices have taken deep roots in our social set-up and have impinged an irretrievable buffet to all the hoary cultural heritage of India which was "a fount where all the rest of civilisation slaked their unenlightenment". Ironically enough, the effete glow of India of good olden days still beckons the rest of the humanity to a path away from the huge annihilation looming large over it.

Much candidly speaking, we haven't developed any national character. . . we have ceased to emulate each other drawing sustenance from our invaluable past. Instead, we gave ourselves to the capturing of will-of-the-wisp occidental materialism. It was hoped that with the achievement of political sovereignty, the persons at the helm of affairs will remove the mental cobwebs of centuries-old slavery and in their place infuse new ideas of self-awakening and creativeness. But sorely enough, these so-called wire-pullers, bearing a few devoted leaders, fell to grind their own axe. Their watchword became: "SELF BEFORE NATION". To fill their pockets, they took everything for grist to their mills. Instead of channelising the young into good outlets, they began to decoy them as instruments for self-aggrandizement. No finding it so paying a design, they then took refuge under the "linguistic ghoul" to disintegrate the national homogeneity. History tells that much blood has been shed in the name of God and religion. But here more blood is being shed in the name of language. Besides politics, other social institutions are being destroyed with each other to sink the nation

lower still. Religion too spread its venomous tentacles far and near.

Then there are political parties to undo the rest. They not only subject the ruling government and its administrative machinery to scurrilous denunciation, but also go to the extent of making clandestine liaisons with anti-India foreign States. Excessive provincialism is another monster. Then there is the recreational field. For the public entertainment, cinema has become a popular mode. But the depictions it makes just shivers the sensible mind to morrow for all the indecency in thought and action they contain.

Vices are many—their origin, development, causes, remedy in each case hold sufficient material to tackle them as separate issues. But there is no tonic for verbal and oral diatribes. The stage is so alarming that it needs something practical to save the nation from further deterioration. And to renovate the social facade completely it needs selfless, ceaseless and devoted efforts.

Force at present is the most befitting and fruitful corrective. All the ills must be crushed with an iron hand. The law should be law in true sense, equal for everyone without any discrimination.

All the moralists, educationists and social reformers should sink their mutual differences. They should rally round a course and that is of giving a national character to the people, of raising the national morale of restoring the cultural and spiritual glow.

'If youth knew, if age could'. These six syllables contain a panacea for all the ills of humanity. If old and the experienced people put confidence in the youth, the latter can literally move heaven and earth with his unmeasurable energies guided by the sagacity of the old heads. This age is for the youth, of the youth and by the youth, of course with a becoming status to the old.

(Kayel, Jullundur)

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CAPITAL PUNISHMENT

Sir,

The Indian Penal Code provides the penalty of capital punishment in case of wilful murder. Whether this extreme penalty of the law as a penal provision should remain in this Code or not, is a question which has been the subject of discussion for sometime in our country. Ratan Bai Jain was the first woman to be hanged in Delhi in Free India; and her execution touched off this controversy.

On a matter like this there are naturally two schools of thought, and there is much to be said in favour of the view held by either school. What those who are against this form of punishment, is summed up as follows: Capital punishment is a relic of barbarism, it is reminiscent of the old days when "eye for eye, and tooth for tooth" was the law; it is completely out of place in the present civilized world. To err is human, and both the Judge and the Jury, being human beings, are prone to make mistakes, which culminate in many innocent persons being sent to gallows. And moreover, this blood-thirsty punishment is not even reformatory or deterrent because once a murderer is dead, then he has nothing to do with good or evil.

But the criticism of antagonists of capital punishment—based as it is on ultra-ethical attitude—does not carry weight enough to abolish it in our country which is infested with poverty, tribal passions, lack of education etc., and where roughly speaking, there are over 9,000 murder cases in a year. In India, we still have to get rid of the factors that make people more prone to commit murders.

Human life, as the moral and ethical grounds go to assert, is the most precious possession, which once lost, cannot be restored. While capital punishment is not a happy thing to have, care has to be taken that the one who has taken someone else's life, is awarded punishment, which is not only adequate but which also deters others who may be inclined to commit murders. And as such in cases of murders, only capital punishment can be adequate and deterrent. For the fear of death is the worst fear that can assail the human mind, and be an effective check on the commission of the heinous crime of murder. I may warn those who are against capital punishment that the removal of this salutary check will

remove the fear of death, and as a result murders will multiply thereby endangering the very peace and safety of our society.

Therefore, whatever humanitarian and other grounds, one cannot but hold that capital punishment, though an unhappy and unfortunate thing with its drawbacks, is a must for our country at least until a suitable time has come for its abolition.

(Rajendra Prasad Goswami, New Delhi)

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FALL OF BERLIN

Sir,

The whole World breathed freely when the Third Reich of Germany had been destroyed in 1945. Notwithstanding the overwhelming pressure of poverty—caused by World War II, World was spending her days peacefully on thinking that there was no possibility of the subsequent complication firstly because that Germany, concerning which the two previous Wars happened, had been fatally wounded and secondly that the balance of power had been made in between the Capitalist westerns and the Communist Soviet Union, as a result of which it was impossible for anyone of them to stand against another so easily.

Thus with regard to the question why Germany surrendered herself to her enemies it is not superfluous to state that Hitler's voraciousness urged his allied powers to conquer Germany fully. Hitler was a man, endowed with a bundle of sentiments and emotions. That there is a limit of man's power Hitler could not believe. All that Hitler could do was extrajudicial and unscrupulous to the allied powers. And this was the reason why Berlin fell down.

But the person who is really responsible for this atmosphere of Germany—the atmosphere which is awe-inspiring and formidable and as such indicates the possibility of War, is the ex-President of U.S.A.—D. D. Eisenhower. In 1945, when General Eisenhower came near at Berlin, he could easily capture Berlin only for America, of course had he been so wished to do that. Even W. Churchill told him to do so. But Eisenhower leaving the problem of Berlin in the hands of Russia went on solving the other problems of Germany.

That politics differs from man to man in different ages is clearly visible from the simple fact that where J. Stalin was much disposed of breaking Germany into pieces there N. K. Khrushchev wants to

monize the two blocks of Germany into one chain. But incontrovertibly true that Krushchev's thinking about Germany however invigorative and significant may be, is more philosophical than a real one. Because he gets hold of such view which is the expression of heterogeneous medley of surprising novelty. On the one hand he says that the four big powers will have to sign on the Charter of peace belonging to Berlin, and on the other hand he has declared that Berlin-problem will remain unsolved if the Westerns do not recognize East Germany as an independent and free state.

The Westerns are not hoodwinked by the bewitchment of Krushchev's diplomatic policy and that is why they have said "if war comes let it come".

But remembering her own conditions Russia ought to take the challenge of the Westerns. Russia may fall in a great danger unless she withdraws her proposal. Firstly because after the Potsdam Conference, Russia once tried indefatigably so as to keep the sanctity of East Germany. But America had entered into her recognized portion e.g. West Berlin inspite of Stalin's trial.

So if Russia and America follow their own dogmatic principles doggedly, World War III will not be far away from our imagination.

But is there not any method which can appease the situation of Germany—the situation which, involving social, financial and political affairs of the whole World, has, call it by what name one likes, timorous consequences? The answer is as clear as day light. There is no international law which can prevent these two martial races—U.S.A. and U.S.S.R. from War.

(Prabhat Kumar Santra, Midnapur)

OUR ENGINEERS AND SCIENTISTS

Sir,

We hear a lot about the dearth of Engineers and Scientists in our country. Actually speaking, position is just the reverse. There are more engineers and scientists than their demand. Still our government is opening more Engineering Colleges and polytechnics by spending lakhs of rupees. I have seen qualified engineers and technicians working against inferior posts just to make both ends meet. Similar is the case with engineering diploma holders and overseers.

After getting first class in M.Sc. in various subjects, Indian students leave for foreign countries to get Ph.D. degrees. Most of them do not return and settle in those countries. The reason is quite obvious. They are sure of getting a suitable employment in that country. It means that there is no dearth of scientific and engineering talents in our country. But the fact is that they are not properly utilized.

Emoluments received in foreign countries are also much more in proportion. Here an engineer hardly gets Rs. 400 p.m. but in foreign countries, he gets a four figured salary. Our government should think of absorbing engineering and scientific talents available in the country rather than opening more engineering colleges to swell the ranks of educated unemployed. Engineers and Scientists sent abroad should be called back to serve their own country after training.

(S. S. Jaswal, Naraingarh)

IMPORTANCE OF HOBBY

Sir,

A hobby is a good exercise for an intellect and aptitude. It is a fresh dose to a weary and stale mind. The people who are keen about maintaining certain hobbies seldom face frustration and aimlessness in life. Moreover, a hobby-minded people have every opportunity to rise as a few men among the myriads. So much so, the maintenance of certain hobbies is disciplining of one's thoughts and tacit actions to the right channel. To be more precise, we may say that to get the best use of our leisure is a hobby.

But it has been a matter of regret to observe that people in India are less hobby-minded. In this context our students' community is to be mentioned in particular, as the hobby forms a part of their academic career. Mostly students' precious hours of leisure are consumed in futile pursuits such as agitations, strikes and eve-teasing. Perhaps, these notorious activities form a part of their favourite hobbies? The main reason why our students are disinterested in hobbies is not far to seek. It is obvious that we do not have any literary clubs or well organised units in our educational institutions, which may inculcate among the students the urge for hobby or other activities of similar type. So we ought to

(Continued on page 840)

FILM WORLD

BERLIN FILM FAIR AWARDS

The feature film jury of the eleventh international film festival in Berlin, presided over by Mr. James Quinn, Director of the British Film Institute, awarded on July 4, 1961, the topmost prize of the festival, the Golden Bear, to Italy's "La Notte," directed by Michelangelo Antonioni, who also received a prize from the jury of the international film critics' organisation.

The "best director" award (Silver Bear) went to West Germany's Bernhard Wicki for his film, "Miracle of Malachias," for dynamic use of the film medium, sustained inspiration and the choice and handling of actors."

The "best actor" award (Silver Bear) went to Britain's Peter Finch for his performance in the British entry, "No Love for Johnnie."

French actress Anna Karina received the "best actress" award (Silver Bear) for her role in the French entry, "The Femme est une Femme" ("A Woman is a Woman").

The jury also gave the festival's Special Award No. 1 (Silver Bear) to "Une Femme est une Femme" (France) "for its originality, boldness and youthfulness and for an adventurous approach to film-making which challenges the conventions of screen comedy."

The jury awarded Special Award No. 2 (Silver Bear) to the South Korean film, "Mabu," and the Dutch film, "The Joyous Eve," as contributions by two nations which have recently turned to feature film production and reveal, in spite of various handicaps, an effort worthy of encouragement.

The Catholic Cinema Bureau awarded its prize to the United States entry, "Question Seven."

The jury for documentary films, presided over by Dr. W. de Vogel (Netherlands) made the following awards:

Long documentaries: Golden Bear for "Description d'un Combat" (Israel) and Silver Bear for "Traumland der Sehnsucht" (West Germany).

Short Documentaries: Golden Bear for "Das Gesicht von der Stange" (West Ger-

many). Silver Bears to "Chimichimito" (Venezuela), "De Lage Landen" (Netherlands), "Lo Specchio, la tigre e la pianura" (Italy), "Sirenes" (Belgium) and "Morning on the Lievre" (Canada).

13 COUNTRIES TO MAKE A FILM

On the initiative of the Soviet Peace Committee, film workers from 13 countries will "shoot" an anti-war documentary, "A Young Man's Day." The film, showing the striving of youth for peace and friendship among nations, will consist of a number of short episodes. The Soviet contribution will be devoted to a young sapper, Viktor Demidov, who, in recent years, has rendered harmless a large number of unexploded German shells and mines of the last war in the Leningrad area.

The film will be "shot" simultaneously in China, North Korea, Czechoslovakia, Rumania, Bulgaria, Hungary, France, Italy, Cuba, Uruguay, Japan and West Germany.

SELZNICK FILM AWARDS

The Selznick Golden Laurel Trophy this year for outstanding contribution to film art was awarded to Sweden's world-famous film-maker, Ingmar Bergman.

The award-presentation ceremony, held in Berlin for the first time, took place at the Zoo Palast cinema on June 29.

The Ambassador of the United States of America in the Federal Republic of Germany, Mr. Walter C. Dowling, distributed the Selznick Silver Laurel Medals and the Golden Laurel Prize.

The Golden Laurel Prize was awarded to Japan's "Ikuru," directed by Akira Kurosawa.

The prize for the best documentary film was awarded to the Belgian movie, "Herrscher Des Urwalds."

Mr. David O. Selznick was himself present in Berlin during the award-giving ceremony and in a brief speech explained that these prizes were given to a film producer and directors, every year, "who have done the most for a better understanding of the people of the world and found the same time the best form of art for the time."

The previous winners of the Selznick Golden Laurel Trophy have been—Sir Alexander Korda (1953), Sir Michael Balcon (1954), Vittorio De Sica (1955), Sir Laurence Olivier (1956), Rene Clair (1957), Jean Renoir (1958) and Satyajit Roy (1959).

MOSCOW FILM FESTIVAL AWARDS

The Japanese film, "The Island," directed by Kaneto Shindo, and the Soviet picture, "The Clear Sky," made by Grigori Zhukhrai, shared the Grand Prize of the second Moscow International Film Festival.

The Gold Medal of the Moscow Film Festival—the Jury's Special Prize—has been awarded to the Italian film, "Everyone Goes Home," directed by Luigi Cominini.

Gold medals for high artistic merits have been awarded to the East German picture, "Professor Mamlock," directed by Konrad Wolf, and the Bulgarian film, "How Young We Have Been," directed by Binka Zhelazkova.

A gold medal for the best documentary film went to the picture by Italian film director Romolo Marcellini, "The Big Olympics."

Silver medals were awarded to the Hungarian feature film, "Alba Regia," made by Mikhaly Szemes, and the Rumanian picture, "Thirst," directed by Mircea Dragan.

A silver medal for the best comedy film went to the West German director, Kurt Hoffmann, for his film, "The Haunted Castle."

Silver medals were also awarded to the documentaries, "Birth of a Ship" (Poland—director and scriptwriter Jan Lomnicki), "Lights and People" (Bulgarian—director and cameraman Khristo Kovachev, the British popular science film, "The River of Life," (director and cameraman John Taylor), the Czechoslovak animated cartoon, "Parasite" (director and script writer Vladimir Legky).

A silver medal of the Moscow Film Festival for the best direction went to the French director, Armand Gatti—the maker of "The Enclosure." A silver medal has also been awarded to the Polish cameraman, Boguslav Lembah, who photographed the picture, "The City Dies Tonight."

The silver medal for the best performance of a woman's role went to the Chinese film star, Yui Lang, who played the title role in "A Revolutionary's Family." Bri-

tish actor Peter Finch won the prize for the best performance of a man's role in "The Trials of Oscar Wilde," and Indonesian actor Bambang Hermanto for his acting in "Fighters for Freedom."

A silver medal was also won by artistes Bill Constable (Sets) and Morgan (costumes) in "The Trials of Oscar Wilde."

The Union of Soviet Societies for friendship and cultural relations with foreign countries awarded a prize to the film by Edvin Tiemroth, "The Last Winter" (Denmark), submitted for the Moscow Film Festival; to the Argentine actor and director Ugo Del Carril—producer and performer of the title role in "This Is My Land"—and Ralph Bellamy, who played Roosevelt in "Sunrise at Campobello."

The Union of Film Workers of the U.S.S.R. awarded prizes to the films, "Fire on the Second Line of the Front," directed by Phan Van Hua (Democratic Republic of Vietnam), and "Tumangan River," directed by Chen San In, and also to the Swiss director Michel Dickoff—producer of "Wilhelm Tell."

The Union of Writers of the U.S.S.R. awarded a prize to the Cuban film, "Stories About the Revolution" (directed by Thomas Gutierrez Alea), and the Union of Journalists to the Swiss film, "Notes about the Emigration—Spain 1960," made by Jasinto Esteva Greve and Paulo Brunatoo.

The Union of Composers of the U.S.S.R. awarded a prize to Hikaru Hayashi—composer of the film, "The Island" (Japan). The Soviet Peace Committee awarded a prize to the Polish film, "The City Dies Tonight," directed by Jan Rybkowski. The Committee of Youth Organisations of the U.S.S.R. awarded a prize to "The Morrow of Nangil Village," made jointly with Mali cinema workers by the Dutch film director, Joris Ivens. The Union of Sports Societies and Organisations of the U.S.S.R. awarded a prize to the Italian film, "The Big Olympics," directed by Romolo Marcellini. (The Festival jury did not award prizes for music and script-writing.)

SPANISH FILM FETE AWARD

Marlon Brando's own "One Eyed Jacks"—in which he made his debut as director, too,—has won the Golden Sea Shell, the first prize for the "Best" picture, at the Ninth Annual International Film Festival at San Sebastian in Spain.

The Mexican star, Pina Pellicer, who plays the role of Louisa (Brando's leading lady) won the Best Actress award for her performance in "One Eyed Jacks." This is Miss Pellicer's first appearance in a film.

Using the basic outline of America's popular film form—the outdoor drama—Brando has presented in "One Eyed Jacks" a tale of honour, pride, vengeance and love. The characters are inexorably moved by fate in a manner they cannot begin to resist, as a feud of bad blood is brought to a boiling climax. Once motivated, neither the avenger nor his quarry can rest until treachery and dishonour have been repaid in kind.

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GERMAN PRESS AWARD

Sophia Loren won the German Press prize, "Bambi," for the year 1960. This is an annual prize awarded by the magazine, "Film Revue," and goes to the best actress of the year. The "Bambi" has been won for four years in succession by Gina Lollobrigida.

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BOSTON FILM FESTIVAL AWARDS

Four feature films were honoured with special commendations at the conclusion of Boston's First International Film Festival in Leeb Drama Centre at Harvard University in Cambridge.

The four of the 12 films shown in competition, which received citations and commendations for general excellence were: "Macario" (Mexico), for overall excellence; "The Good Soldier Schweik" (Germany), for general excellence in comedy; "The Sand Castle" (U.S.), commendation for breaking with conventional story techniques and presentation. "The Pickpocket" (France), commendation for philosophic statement.

Four short features, of the 19 screened, were similarly honoured: "Moment of Happiness" (U.S.), for excellence in basic cinematic technique; "Language of Faces" (U.S.), for courageous presentation of a contemporary issue; "Fajalobbi" (Dutch), for excellence as an ethnographic survey; and "Seaward, the Great Ship," for pictorial excellence.

The award jury was made up of members from the faculties of Boston University, Boston College, Harvard University and the Massachusetts Institute of Technology and the citations were awarded on the basis of noncommercial values judging

each film "for its work in cinematic quality, use of technique, or deviation from standard techniques."

READERS' VIEWS

(Continued from page 837)

have in our schools and colleges literary and entertainment clubs to be formed from amongst students and teachers/professors, representing different shades of opinions and activities as well as possessing flare for sportsmanship.

Besides, it would not be irrelevant to mention that the purpose of education is defeated if curricular activities are not encouraged in our educational institutions.

(Amrit Lal Chaddha, Simla)

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YOUR EDITORIAL

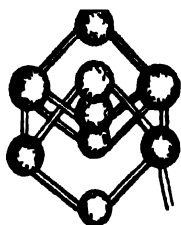
Sir,

I read with great interest the Editorial of your esteemed journal of July '61, under the caption 'Communalism and National Disintegration'. I fully agree with your views regarding Congress Party that after fourteen years of independence the secular government has been unable to root-out communalism. But to put all the blame on the Congress Government for its flimsy policies is to do injustice to the government itself.

It is an admitted fact that 'Backward Classes' have been oppressed much by the so-called 'forward classes', since time immemorial. If they are given opportunity to come forward with other classes of the society, one should not raise objection. This policy of the Government is not a narrow form of communalism, but to give an opportunity to all to take part in nation's welfare as well as in public administration. To quote the example of Nagan Gowada Committee on Backward Classes, appointed by the Mysore Government, does not indicate that this tendency prevails in all States. It seems that you have taken a narrow sense to strengthen your case which is not just and fair.

The recent decision of the Panjab Government can be cited in this connection. The Government of Panjab has declared all persons as members of backward classes, whose income is less than Rupees hundred a month. This step of the Panjab Government is undoubtedly, an wise step and fulfils the meaning of 'Backward' Classes' in true sense.

(Rajendra Pratap Rana, Haryana)



SCIENCE & INVENTION

THIRTY U.S. SATELLITES IN ORBIT

The number of U.S. satellites whirling through space now stands at 30. Thirteen of the satellites continue to transmit scientific data to earth.

In all, the United States has launched 47 space vehicles, 28 of which are orbiting the earth and two the sun. Seventeen have since returned to the earth's atmosphere and burned.

One of the satellites, Echo I, is still visible to the naked eye as it circles far overhead.

The United States has also shot a man into space on a programmed flight spanning the distance between the Florida coast and Grand Bahamas island.

Scientists have already started to study information being sent back to earth from the two satellites which were put into orbit on July 12. The weather research space vehicle—Tiros III—detects and warns of storms in their early stages.

The other satellite, Midas, was launched from Point Arguilla, California, as one of several tests in developing a satellite system to give almost instant warning of any missile fired from anywhere in the world. Midas carries an infra-red eye which detects the heat from a missile's exhaust even hundreds of kilometers away.

The Tiros III weather satellite has already sent back information on a storm off Labrador which might have gone undetected.

Its wide-angle television cameras gather pictures showing the origin, development and movement of storms. One camera can take a picture of an area three times the size of France.

A hurricane hunter plane may team with Tiros III to investigate a possible new storm. The airplane was to leave Puerto Rico to check on what the Weather Bureau calls a "disturbed area" in the Caribbean near the Lesser Antilles.

PLASTIC HOUSES

By the time the decade of the 1980's rolls around, many Americans will be liv-

ing in houses made entirely of plastics, an industry specialist predicted in New York.

Henry Devore, of the Allied Chemical Corporation, told the Ninth National Plastics Exposition that home builders are already making extensive use of plastics in various construction areas. He described an experimental building erected by army engineers at Fort Belvoir, Virginia, as a practical example of progress in plastics use. He said the building, about the size of a two-car garage, was made entirely of plastic panels, moulded and shaped from foam sprayed from a 55-gallon barrel.

THE NEUTRON BOMB

The Soviet Union and the United States are now engaged in developing yet another bomb—the neutron bomb.

According to American scientific opinion, the lead which the West had over the East when the nuclear tests were suspended in 1958 has now been partially lost and the successful development of the neutron bomb before the Russians could produce it will fill the gap.

The neutron bomb is described as the "third generation nuclear weapon" and also as "Death Ray". This will kill the human beings but will leave buildings intact and even free from radio-activity.

It is expected to produce a greater proportion of neutrons and gamma rays than the normal nuclear weapon. Any one within the radius of two miles will be affected by neutrons and will die a lingering death due to the loss of muscular control and difficulty in breathing.

According to well-informed sources, both the Soviet Union and the United States started production of this bomb at the same time in 1952.

THE AGE OF MAN!

Man has walked the earth for at least 1,750,000 years—more than twice as long as hitherto believed—the National Geographic Society reported today.

In support of this statement, the society cited studies made by the University of

California on fossilised remains of "Zinjanthropus", who still had many monkey like characteristics, but walked, say the university's scientists, carrying his head erect, like true man.

The remains were found in Tanganyika. Their age was assessed by determining the age of the earth in which they were fossilised through the known rate of atomic decay of the potassium contained in the earth.

NOISE IS A BIG PROBLEM

Noise is becoming a big social problem, experts have been told at a London conference attended by delegates from Britain, the U.S.A. and Europe.

Speaking at the Anti Noise Conference, Mr D W Robinson, of the National Physical Laboratory, said among the noisiest of the noisy are motor-cyclists.

Aircraft manufacturers, too, he added, were "purveyors of the most powerful din". Big money was being spent by the aircraft industry on planning against noise.

The British Government were also taking the problem very seriously, said Mr Denzil Fraeth, Parliamentary Secretary to the Minister for Science.

Mr. Robinson said the noise from a jet plane was just energy escaping. Its shattering roar was "merely a leak".

To reduce it to an inaudible level, it would be necessary to adjust the leak about one part of 10,000,000,000.

A further example was the calculation that all the noise from a football cup final crowd would scarcely contain enough energy to boil a kettle.

Mr. Robinson said there was no British University professor of acoustics, and few students did any serious acoustics in their studies. "If this conference can do anything to direct some of our bright young men to take up this kind of work", went on Mr. Robinson, "we shall have taken an important step towards solving some of our noisy problems."

NEW SPEED RECORD

An X-15 rocket plane set a record of 3,690 m.p.h. on June 23, at Edwards Air Force Base (U.S.)

The record—better than a mile a second—caused friction which heated the

metal skin of the needle-nosed plane to 750° F.

Major Robert White set the record despite a drop in cabin pressure early in the flight which caused his pressure suit to expand.

The previous record was 3,370 m.p.h. set by the X-15 on May 25.

DIAMONDS FROM SHOCK WAVE

Diamonds were artificially formed when an explosive shock ripped through a tiny pile of graphite.

Although not the type of diamond that would go in an engagement ring, the black diamonds were still the first ever produced by a shock wave. The diamonds sprang into existence when a one-pound explosive charge was set off driving a split-second shock wave into a graphite container with a force about 3,000,000 pounds per square inch.

Although the purpose of the experiment was "to study the effects of explosive shocks on various minerals," Dr Paul S DeCarli of the Stanford Research Institute, California, and Dr. John C Jamieson of the University of Chicago do not overlook the fact that this may be a new way of creating man-made industrial diamonds.

The experiments also unintentionally demonstrated that diamonds found in some meteorites could have formed under high pressure when a meteorite slams into the earth. Some scientists support this theory, introduced by Dr. Edward Anders of the University of Chicago, whereas others believe the diamonds formed deep within a body in outer space that later crashed into the earth.

"Although the experiment strongly supports the Anders theory, it does not discredit the other idea," Dr. Jamieson said, "The experimental shock wave, of much shorter duration than when a meteor hits the earth, will have to be lengthened in some way before a definite conclusion can be reached."

Diamonds have been produced artificially in the U.S.A., Sweden and Africa since 1955, but these processes all used a catalyst plus high laboratory temperatures and pressure instead of shock waves.

NEW METHOD OF SLIMMING

A U.S. scientist has discovered a revolutionary new substance—a “non-food”—which may aid America’s overweight thousands to slim individuals without tears.

The New York Weekly “Life” reported on May 29, he did it by accident while trying to perfect a new motor tyre cord in a rayon and cellophane factory.

The magazine said that Dr. O. A. Battista produced a “jelly-like mess” of cellulose and discovered it was edible. The new non-food is neither tasty nor nutritious and contains no vitamins. In fact it has no food value at all.

But it does keep the stomach happy, fending off hunger pangs which slimmers dread. As a result, it may be put on general sale soon, “Life” said.

SPACE FLIGHT HAZARD

The direct influence of the earth’s magnetic field on space travel is negligible, but indirectly the geomagnetic field is responsible for the greatest hazard of manned space flight, the dangerous Van Allen belts of radiation, according to Dr. Walter Dieminger, professor of astronomy at the University of Goettingen, Hanover, Germany.

“The screening effect of the magnetic field affords a natural protection from this radiation,” Dr. Dieminger said.

Weight consideration would make it impossible to effectively screen a space ship and its human occupant from prolonged exposure to the Van Allen belts. The high energy radiation there far exceeds any that can be duplicated on earth.

The 12-foot concrete walls used to screen the radiation produced by some nuclear reactors could hardly be used in a space vehicle, Dr. Dieminger said.

He suggested that one solution lies in swift transit through these danger areas so that man would be exposed to the radiation for a minimum of time. However, he would receive some exposure even if the transit time was a matter of hours.

Theoretically, if man could make his leap into space from the polar areas of the earth, he could avoid the dangerous Van Allen belt exposures.

THE DANGERS OF SMOKING

Doctors should help people overcome the tobacco habit, a British surgeon says, charging that smoking is a severe form of drug addiction and related to cancer of the lung.

Dr. Ronald W. Raven, Royal Marsden Hospital and Institute of Cancer Research, London, says that the serious rise in the occurrence of lung cancer in Great Britain and other countries “is a tremendous challenge to preventive medicine.”

He says that although lung cancer is “now the greatest menace of all varieties of cancer and the harbinger of death to increasing thousands of people who will die in their prime,” the solution of this problem is well known.

Dr. Raven says the extensive evidence “associating tobacco smoking and lung cancer is clear for all to study,” and added that the effects of nicotine on the tissues in relation to cancer should be investigated.

The effects of nicotine on the unborn child should be studied, the surgeon said, “since nicotine can pass through the placental circulation.” He raised the possibility of cellular changes in the fetus that may show effects in later life.

Apart from lung cancer, however, Dr. Raven says the lethal force of cancer has diminished and the outlook for men and women is better.

“A much greater international effort is required,” he concludes noting that more effective use should be made of present knowledge and that new ideas and clues are urgently required.

LIFE POSSIBLE ON OTHER PLANETS

“Direct exploration of the solar system which is feasible as shown by Yuri Gagarin’s successful flight, is to establish how widely life is distributed on planets and in outer space,” said Vasily Kuprevich, President of the Byelorussian Academy of Sciences, in Moscow, on June 24, 1961.

We firmly believe, said the noted biologist, that life is everywhere where there are conditions for its origin and existence. This does not necessarily mean the same forms of life that exist on earth. Such forms are possible where carbon is replac-

ed by other elements, such as, for instance, silicon.

Vasily Kuprevich asserted: We shall undoubtedly find on planets new, unknown forms of life which in their historical development may be far ahead by hundreds of millions of years, or on the contrary, in the first stage of formation. It is probable that creatures will be found that have a tremendous reproductive or viable strength. To put it in a nutshell, man's study of the resources of living substances in outer space hold out fantastic possibilities of bringing to the earth useful flora and maybe fauna, the Byelorussian scientist said.

Commenting on the assertions by some scientists on the impossibility of life on other planets, specifically on those closest of us, Vasily Kuprevich pointed out that the exponents of such views should consider that life on earth is scattered everywhere even on those spots which seem to be less favoured than neighbouring planets. Vasily Kuprevich suggested that instruments should be installed in artificial satellites returning to earth which would catch in outer space the smallest material particles. This would make it possible to ascertain the possibility of distribution of organic substances and the most simple forms of life in outer space.

TRAPPING METEORITES FROM OUTER SPACE

A U.S. Air Force specially designed Aerobee-HI rocket has been sent high over the White Sands, New Mexico, desert to trap and recover meteorites from outside the earth's atmosphere.

Success of the experiment will not be known for several weeks until a study is made of particles trapped in the special nose cone of the rocket.

To snare the space particles, known as "dusty space bullets," the Air Force has fitted inside the nose cone of the rocket boxes containing electron microscope screens and plastic materials in small triple layers.

When the Aerobee-HI reached an altitude of about 40 miles an electronic device exposed the screen-like layers or "leaves" of a portion of the nose cone outward. They remained extended as the rocket shot upward to an altitude of 101 miles. In its descent, 55 miles above the earth the "leaves" retracted and sealed back into

their original position. Then at 50 miles above the earth, the nose cone separated from the rocket and fell free to 20,000 feet where a pilot parachute opened. At 10,000 feet, the main parachute opened and lowered the nose cone safely to the ground.

The "dusty space bullets" are almost infinitesimal in size and are measured in micromillimeters, Air Force scientists say. They are as lethal as bullets to a space traveller due to their terrific velocity.

* * *

A CLUSTER OF WHITE DWARFS DISCOVERED

A great cluster of white dwarfs—super-dense stars of low luminosity and high temperature—has been discovered by a group of astronomers of the Byurakan—Astrophysical Observatory of the Armenian Academy of Sciences for the first time in the history of astronomy. It was detected on pictures taken by means of the 21-inch Schmidt telescope.

In view of the remoteness and extremely low luminosity of the white dwarfs, so far all observatories of the world had discovered only about 300 isolated stars of this type.

During the past year alone Armenian astrophysicists discovered 200 odd isolated white dwarfs of which 100 form clusters.

In an interview with TASS, the director of the Byurakan Observatory, Academician Viktor Ambartsumyan, said that the cluster had an elongated form with the biggest linear diameter of 25 light years (one light year is the distance covered by light in 12 months). It was discovered in the lyre constellation about 800 light years away from the earth.

Asked what are the distinguishing features of these remote celestial bodies, the scientist said:

If a matchbox could be filled with the matter of a white dwarf it would have weighed several tons. The luminosity of these stars is approximately a thousand times weaker than that of the sun, while their size is almost the same. Therefore at such tremendous distances it is extremely difficult to detect them even with modern optical instruments.

In the first place, it should be noted, Academician Ambartsumyan went on, that this is the first instance in the history of world astronomy when a whole cluster of

white dwarfs has been discovered. The latter represent the latest phase in the life of a star. This group of white dwarfs therefore must be very old—more than ten thousand million years. It is apparently older than other constellations of our galaxy. This determination provided us with new data on the age of our galaxy.

In this connection there arises a number of new fascinating problems. In particular we shall try to find other remote stellar clusters of a similar type, i.e. consisting of white dwarfs. We plan to study the difference between the structure of the white dwarf cluster and of other stellar systems. Finally we intend to draw final conclusions on the age of these interesting stellar systems, the scientist said.

* * *

X-RAY MOVIES HELP THE DEAF TO SPEAK

Aid to deaf people who are handicapped in speaking by absence of hearing, is being given in the United States through the use of X-ray movies showing the speech mechanism in action.

The X-ray films, produced at the Medical Center of the University of California in Los Angeles, are designed to help teacher and pupil to see what goes on in the mouth and throat during speech.

The method, known as cinefluorography, consists of coating the speech mechanism—the tongue, soft palate, etc.—of the speaker with vanilla-flavoured radio-opaque barium and then making X-ray movies while he or she utters basic speech components known as phonemes, as well as words and phrases. The various parts of the anatomy used in speech are then clearly visible in action. And the deaf person is able to visualize the sequence of articulatory positions and the duration necessary to achieve a smooth speech flow.

Films have been made by the team in California for both English and Spanish-speaking groups, and have been shown both in the United States and in Mexico.

* * *

PHOTOENERGETICS—A NEW BRANCH OF SCIENCE

The problem of energetic connections between the sun and life on earth and other planets is of major importance in our time of space flights, A. Shakhov, D.Sc. (Biology) said in *Pravda* of July 23.

The scientist emphasized that a new hopeful branch of science—biological photoenergetics—is now being created by the efforts, mainly, of Soviet specialists. It is called upon to investigate the effect of radiated solar energy in a wide range of waves on the activity of plant and animal organisms. This science is of great importance for man's conquest of outer space, for the development of problems of cosmic biology and agriculture.

A new problem—photoenergetics of plants—is being born at the junction of physiology and biophysics. Photoenergetics has great prospects, especially for the advance of plant growing in the North, as shown by work done by Soviet scientists beyond the Arctic Circle on Kola Peninsula. Professor Shakhov pointed out.

* * *

SOURCES OF ENERGY

A Russian scientist predicts that electricity will be produced by nuclear fusion using water as the raw material "may be tomorrow, may be in 10 years."

British, American and Russian scientists are working on the problem of controlling thermonuclear (H-bomb) reactions for peaceful purposes.

He foresees a time when human physical work will no longer be necessary. The world-wide use of electric energy could be increased a hundred-fold, the Russian says, by thermonuclear electric power stations and other new sources of power.

Such an abundance of energy could be used to control the weather, Prof. Semyonov predicts.

He forecasts use of three other sources of electric energy: the "electriceskii element" or fuel cell; the direct conversion of the sun's rays into useful energy, and the heat deep in the earth that wells up periodically in the form of lava and geysers.

The fuel cell would chemically produce electricity without the heat transfer, mechanical moving parts or biclers required in conventional power plants. The efficiency of such a system would be 100 per cent theoretically. But in practice it would be only 70 per cent, Prof. Semyonov believes.

A fuel cell similar to an electric cell battery, but more powerful and efficient, would be most useful in transport and agriculture. Prof. Semyonov expects such a device will be in use in 10 to 15 years.

The greatest source of energy in nature is the sun. Plants convert the sun's radiant energy into chemical energy, but they are less than 10 per cent efficient, according to Prof. Semyonov. Man some day will be able to convert solar energy into electricity at the rate of 40 per cent to 45 per cent efficiency, he predicts, urging scientists to work on the problem because "the quantity of solar energy is so immense that this would be an inexhaustible source of energy."

Using the heat in the earth's molten core is theoretically possible Prof. Semyonov reports, but he does not predict when it will be done.

* * *

ELECTROLYTIC ENGRAVING ON METALS

A quick and economic method for engraving trade-marks, figures or letters on hard metals and alloys in their finished condition has been patented by the Council of Scientific and Industrial Research and released free to industry.

The new process has been developed at the National Physical Laboratory, New Delhi.

Etching can be completed in about 20 to 30 seconds by this process. It makes use of a 12-volt battery for electricity supply. Alternating current can also be used.

The process requires a heavy-duty stencil (waxed tissue paper) on which the trade-mark is stamped or typed, and a woollen felt pad in which electrolyte is soaked. The article to be etched is placed alongside the stencil, felt pad and the metal plate which complete the circuit. The available methods such as stamping or spark erosion induce undesirable stresses or involve lengthy operations.

* * *

SOUND USED AS ANAESTHETIC

A loud noise "like a waterfall" has been successfully used by a group of American dentists instead of anaesthetics.

The patient wears headphones, through which soothing stereophonic music is relayed. When the drill or other instruments begin to cause pain, he turns a knob on his chair, and "random noise" comes rushing through his headphones.

The knob controls the loudness of the noise, which is electronically produced and sounds like a loud-waterfall.

When the waterfall is making, enough

noise, a high proportion of patients feel little or no pain. One dentist, in Cambridge, Mass, found that 65 per cent of his patients who had previously needed nitrous oxide or other analgesic could manage with sound instead. He has successfully extracted more than 200 teeth without patients complaining.

A group of Boston dentists has confirmed these results. In 9,000 dental operations, only 10 per cent of the patients needed any analgesic in addition to the noise.

The music soothes and relaxes the patients. Then the waterfall noise masks the sound of the drill, and also "drowns out" the pain.

Patients enjoy the procedure because they feel they are to some extent in control of the situation instead of the dentist. They can turn up the noise to whatever level they like. Dentists can observe how much discomfort they are causing by watching the patient's knob-twiddling.

Some preliminary experiments show that the same technique can be used for minor surgical operations, including "removal of toenails, labour and childbirth, and the removal of a polyp from a shoulder." Care has to be taken to ensure that patients do not damage their hearing by turning up the sound too high and for too long.

How the effect works is not clearly understood. It may be connected with the fact that nerve pathways connected with hearing and with pain come close to each other in certain parts of the brain. One suggestion is that if the auditory nerves are registering loud sounds full blast, the activity of the pain nerves is suppressed—they can't, so to speak, get a twinge in edgeways.

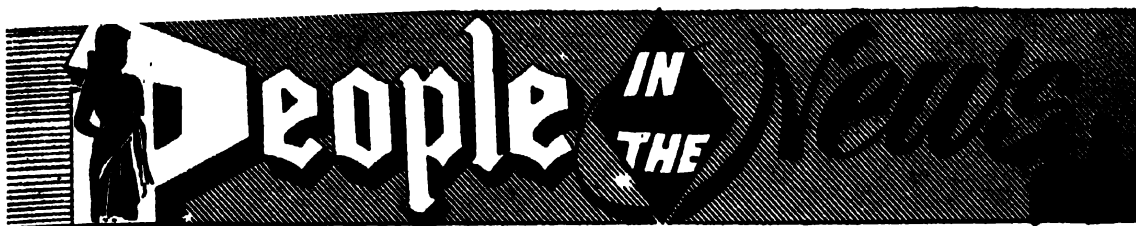
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ACHARYA P. C. RAY

Acharya Profulla Chandra Ray's hundredth birth anniversary was celebrated on August 2. He was a great man who absorbed in himself all possible western knowledge and ideas, without losing his Indian moorings, and worked in various spheres of activity, to enhance the glory and greatness of his country. He gave a great impetus to a keen appreciation and study of chemistry in India, so vital to modern industry and medicine. He preached the ideal of **Swadeshi**, even before it became emphatic during the Partition of Bengal Movement in 1905. Ray's first move in practically demonstrating the Swadeshi ideal was by himself founding the Bengal Chemical and Pharmaceutical Works in a dingy room in Upper Circular Road, Calcutta, in 1892. His greatest discovery in the field of **nitrates**, particularly the **mercurious nitrate** in 1895, was widely applauded the world over as a significant development in the sphere of chemistry. The British scientific journals of those times paid him handsome encomiums. His monumental book, the **History of Hindu Chemistry**, is a labour of fifteen solid years of research, in which he clearly pointed out that we in India had a heritage in chemistry long before European chemists began to develop that branch of Science in the thirteenth and fourteenth centuries. The first volume of that book came out in 1902 and the second was published five years later. An earlier book of his, **India Before and After the Mutiny** revealed his patriotism and his interest in history.

Ray was interested in cleaning up the Hindu Society of its outmoded ways and customs, to suit the changing times. Presiding over the Indian Social Conference in 1917, he bitterly attacked untouchability. Alike, presiding over the Hindu Maha Sabha session in 1922, he advocated widow remarriage. Then, getting himself allied to Gandhian policies, he wanted the Charkha widely introduced in our villages, to prevent rural folk from migrating to cities to become wage-slaves in industries.

Ray spoke at many University convoca-

tions in India. He was given the honorary degree of D.Sc. by the Durham University in Scotland and by the Calcutta University. The British Government knighted him. He came to deliver a series of lectures in the Madras University in 1918, on Ancient Hindu Chemistry. The honorarium paid to him by the University, he turned over to found a chemistry-scholarship in the name of Sir William Wedderburn, one of the founders of the Indian National Congress. Ray held him in respect and admiration. When he addressed the Mysore University convocation in 1926, he told the young men that the craze for degree hunting was no good and that they should seek practical and useful channels of work in life.

A bachelor Brahma Samajist, Ray spent a lot of his money on Chemistry students, research workers and various educational institutions in Bengal, also for a school his father, Harischandra Ray, founded in his native village, Raruli Katipara in Khulna District. His view of charity he once expressed in frank language:

"Of all charities, mere money-giving is the least: sympathy, kind words, gentle judgement, a friendly pressure of weary hands and an encouraging smile will frequently outweigh a mine of coins. Selfishness is the root cause of all the evils in the world; people are too isolated, too much wrapped up in their individual rights, interests and enjoyment. The first person singular is the God of the Age!"

Profulla Chandra Ray was born in a poor family in 1861, first studied in a vernacular school his father founded and then came to Calcutta at the age of nine. After English high schooling, he joined the Presidency College and studied Physics under Sir John Elliott and Chemistry under Sir Alexander Pedler. While in Calcutta, he stomachached the English classics, was impressed by the oratory of Surendranath Banerjee and influenced by the spiritual discourses and lectures of Keshub Chandra Sen, the Brahma leader. Then, winning a scholarship, Ray went to the Edinburgh University for higher studies. Returning nine years later, he became Professor of

Chemistry in the Presidency College on a starting salary of Rs. 250 a month. He retired many years later, with a pension. In 1904, the Government of Bengal sent him to make a study of Chemical Laboratories in Europe.

He died in 1944 at the age of 83.

MAHARAJA OF GWALIOR

Maharaja Jiwajirao Scindia of Gwalior died at Bombay at 11-40 p.m. on Sunday July, 16 after a short illness.

Born on 26th June 1916, the Maharaja was invested with powers on the 2nd November, 1936, at the age of 21. He became Rajpramukh of Madhya Bharat in the year 1948 at the age of 32. With the formation of new Madhya Pradesh, he relinquished the last vestige of power in the year 1956 and devoted himself to the establishment and development of educational institutions.

It had been the tradition of Gwalior rulers that they were soldiers first. In the best tradition of his family the late Maharaja Madhav Rao Scindia enrolled the young Prince as a private on one rupee per month in the Maharani's Own Infantry. His military career began at the age of 4. Only two years later in the year 1922 the prince marched past at the head of the Gwalior Forces and left a deep impression on the minds of spectators.

With the death of Maharaja Madhav Rao Scindia when Prince Jiwajirao was only 9, the training of the future ruler of Gwalior fell on the shoulders of the Mother Maharani. The mother Maharani, much to her credit, protecting the Prince from all shades of courtiers, laid down a rigid course of training in the art of Government and also personal behaviour.

When his training in the administrative departments was taken in hand His Highness learnt theoretically and practically the work of the Revenue Department beginning with surveying and map drawing. Next he learnt settlement operations at Layallpur in the Punjab under Mr. S. K. Kripalani, I.C.S., and from there proceeded to Poona for training in District and General Administration of an Indian Province. He was sent to Mysore to receive training in the administration of an Indian State. His Highness's administrative training was exhaustive.

Addressing the Legislative Assembly on March 1, 1938, the late Maharaja re-

marked: 'I take this opportunity of announcing to you in as clear words as possible that I meant to make this body a true representative of the different shades of opinion and a responsible adviser and guide in the matters of administration.'

Pursuant to this declaration he appointed a committee to investigate and recommend a scheme of political reforms which were finally announced on June 14, 1939.

The proclamation laid down the following fundamental rights:

- (i) Liberty of speech and liberty of the press;
- (ii) Liberty of conscience; and
- (iii) Liberty of Association.

It further prescribed direct election to both the houses of legislature and substantial restrictions were placed on the veto to be exercised by the Ruler and a separate privy-purse was earmarked.

The Indian Independence Act, 1947, released the States from all their obligations to the Crown. It was evident that if in consequence Indian States had become separate independent entities there would have been a vacuum, both political and in the economic and other fields. The Maharaja of Gwalior, with patriotism and foresight was one of the first among the senior Princes to respond to the call of Sardar Patel to accede to the Dominion of India. His accession provided an example to other Princes.

Many princely States were interested in leaving almost nil or negligible opening balances to be handed over to the successor Government. Maharaja Scindia, on the contrary, left a sizeable fund not only in the treasuries of the State but he also created a Gangajali Fund with a corpus of about Rs. 2.50 crores as a special reserve. His Highness had made this fund available for public benefit.

On the formation of new Madhya Pradesh, the late Maharaja Scindia, divested himself of his functions as Rajpramukh and interested himself in educational institutions. The rapid expansion of Gwalior in the educational field owes to the creative interest of the late Maharaja. Even during his active rule he had a great passion for the advancement of education. It was during his time that the Victoria College at Gwalior (now Maharani Laxmibai College) was raised to the degree and post-graduate

standard. A Degree College for girls—the Kamla Raja Girls College—was established.

The Medical College of Gwalior was established in loving memory of his mother. He contributed a sum from his Privy Purse for the building of Kamla Raja Hospital for women and children. By transferring a sum of about 2 crores from the Gangajali Trust to the Scindia Education Society he brought to reality a dream for establishing an Engineering College and Residential School for girls. The Vikram University of Ujjain came into existence with the gift from the Gangajali Fund.

The Maharaja was the Chancellor of the Benaras Hindu University successively for three terms and was the first Chancellor of Vikram University, Ujjain. In the field of sports he was equally popular. He was intimately connected with the Royal Western India Turf Club and the Willingdon Sports Club, Bombay. He was a good shot and an excellent rider.

VIRGIL I. GRISSOM

Virgil I. Grissom, is the second American selected to ride a rocket into space. From the time of his selection for the project, the 35-year-old astronaut, like the other six members of the original U.S. space team, wanted to make a manned rocket flight.

Grissom, an Air Force captain detailed to the civilian National Aeronautics and Space Administration, is no novice at testing new flight vehicles. He has spent two years doing it at Wright-Patterson Air Force Base prior to passing the rigorous tests for Project Mercury in 1959. "Before that I trained advanced students in jets, and training cadets can be more dangerous than flying combat missions," he says.

Combat flight, too, is an old story to Grissom. During the Communist invasion of Korea he flew 100 missions, coming out unscathed and winning the Distinguished Flying Cross and an Air Medal with Cluster.

In his career as a flier, Grissom has logged 3,400 hours, of which 2,500 were in jet planes.

Medium in height and build, Gus, as he is known to his friends, shares with his space team-mates the distinction of being as nearly perfect a physical specimen as the civilian Space Agency could find, and of having unusually high intelligence.

Grissom joined the Air Force in 1944 but had not reached the flight-training stage when he was discharged at the end of World War II. Before his discharge he had married the former Betty Moore with whom he had gone to school in their hometown of Mitchell, Indiana.

"When Gus got back," his wife recalls, "he went to work for a company that made school buses, but he was as unhappy as any man I've ever seen."

In 1946 he entered Purdue University to study mechanical engineering while his wife worked as a telephone operator, choosing a night shift so Gus could use their room for evening study. Graduated in 1950, he was unable to find a job that appealed to him and went back to the Air Force as a cadet, earning his commission as a second lieutenant in 1951. In addition to his combat, teaching and test flying assignments he has studied aeronautical engineering at the Air Force Institute of Technology.

Grissom's particular area of responsibility in Project Mercury has been the flight control system and the automatic pilot that puts the capsule in the proper position in its space flight and re-entry. Also, Grissom explains, "it includes the hand controls which the pilot can use at his option to control the attitude of the capsule, or in the event of an automatic pilot failure he then can control the attitude or position of the capsule."

There was a time his wife recounted in an article in *Life* magazine, when it appeared that he might be rejected because of hay fever. "But Gus came right back with the argument that hay fever wouldn't make a bit of difference in a space cabin. He won his point—that he'd take his own clean atmosphere with him and there is no ragweed in space. When he was accepted Betty wrote, 'I was every bit as happy as he was.'"

When the astronauts' training began at Langley Air Force Base in Virginia, the Grissoms bought a house nearby. There with their sons Scott, 11 and Mark, 7, they have lived the unpretentious, independent life to which they are accustomed. Grissom is an outdoor man and his hobbies are hunting and fishing when he can find the time. He is also an excellent handball player.

* * *

DR. DONALD GLASER

An eminent American nuclear physicist, one of the youngest in the world to receive the Nobel prize, 34-year-old Dr. Donald Glaser visited India from July 21 through August 14, 1961.

During his tour of this country, under the American Specialists Programme, Dr. Glaser visited Delhi, Ahmedabad, Bombay, Calcutta and Madras to address gatherings of scientists, meet research workers and visit laboratories.

Dr. Glaser received the Nobel prize in physics in December 1960 for his invention of the "bubble chamber" in which atomic particles can be photographed. The device is now in use all over the world, wherever nuclear research is under way. Some experts rank it in importance with the atom smasher as a tool of nuclear science.

Born on September 21, 1926, in Cleveland, Ohio, Dr. Glaser completed high (secondary) school at 15 and then entered Case Institute of Technology intending to qualify as a mechanical engineer. In a few weeks however he changed his mind and took up physics.

He received his Bachelor of Science degree from Case in 1946 and later served there for a year as a teaching fellow and

instructor. Subsequently he moved to California for a teaching fellowship and graduate work at the California Institute of Technology, and obtained a doctoral degree by investigating high energy cosmic rays.

In 1949 Dr. Glaser became an instructor in physics at the University of Michigan, was later made assistant professor, and finally a full professor, in 1957. While an assistant Dr. Glaser began working on the problem of observing subnuclear particles leading him to develop the "bubble chamber." Three years later he joined the University of California of Berkeley to work at the Lawrence Radiation Laboratory which now has the world's largest bubble chamber, a liquid hydrogen model 72 inches long.

Dr. Glaser's research, which won him the Nobel award, concerns the inner world of the atom. Atomic particles are so small that they can't be seen even under the most powerful microscopes. Ninety-nine per cent of the energy and substance of the universe are locked in the dark caverns of an atomic nucleus described as the "citadel of the universe." Inside these infinitesimal recesses changes are constantly taking place at a speed of many thousand-millionths of a second. Dr. Glaser developed a highly sensitive device—the bubble chamber—to de-

DID YOU KNOW. . . .

The small ornamental plants are trained into shapes and proportions of aged big trees in Japan so that a vast landscape can be suggested within the confines of a small room.



The largest mobile land machine in the world is a coal strip mine shovel operating in the United States.



Three decades ago astronomers discovered that the solar system is merely an insignificant part of the Milky Way, only one of millions of galaxies.

tect these events by photographing the trail of bubbles produced by tiny atomic particles when they are shot through a dense, super-heated, liquefied gas by powerful atom smashers.

At first the bubble chamber was about a cubic inch in size, the size of the last joint of one's thumb. During the last six years, however, bubble chambers have grown in size so much so that the biggest one now in existence is about the size of a bath tub. The total associated equipment is the size of an ordinary two-storey house, because of the cameras and the large amount of control equipment required.

Recently, Dr. Glaser has taken to the study of biology, and if he continues it he may be able to apply physics to solving biological problems.

Atomic physicist Glaser is also an accomplished musician. While studying at Case he was a violist for the Cleveland Philharmonic Orchestra. He also plays the violin and piano.

Dr. Glaser married Ruth Louise Thompson in November 1960. She was a University of California graduate student in mathematics, and programmed mathematics problems for an electronic computer as a part-time job.

* * *

Mr. GEORG S. DUCKWITZ

Mr. Georg Ferdinand Duckwitz, 57, who has been appointed Ambassador of the Federal Republic of Germany to India as successor to Dr. Wilhelm Melchers, arrived in New Delhi on Wednesday, July 12, 1961.

Dr. Duckwitz has already introduced himself to India when, accompanying Dr. Heinrich von Brentano the Federal Foreign Minister, on his short visit to this country, he has had an opportunity to meet and know many a leading personality here.

In the series of ambassadorial appointments this is Mr. Duckwitz's second. He had had his first assignment in 1955 when he was appointed Federal Government's ambassador to Denmark. He remained in that post till the year 1959.

His earlier interests, however, lay in the field of commerce and shipping. After studying law at the Freiburg University, he served first with the Import and Export Firm of Roselius and Co. in Bremen and Copenhagen and later with the "HAPAG" shipping line, as their representative in New York.

On his return to Europe in 1939 he was attached to the German Legation in Copenhagen as Expert on Shipping. Incidentally it was there, in 1943, that he learned of the Nazi Government's intention to deport the Danish Jews. At great risk to himself, he informed the Danish underground movement of this plan. Before the Gestapo could intervene, the majority of the Danish Jews had already been smuggled into neutral Sweden, and thus were saved from sure death. In recognition of this Mr. Duckwitz was decorated by the King of Denmark after the termination of the war.

After having represented the German Chambers of Commerce in Copenhagen from 1946 to 1950, Mr. Duckwitz also served as Head of the Economic Section of the German Embassy in Copenhagen from 1950 to 1953 and as Trade Representative in Helsinki from 1953 to 1955.

Prior to the present post Mr. Duckwitz was the Head of the Eastern Department at the Foreign Office, a position which he held ever since his return to Bonn from Denmark in 1959.

* * *

DR. U. KRISHNA RAO

Dr. U. Krishna Rao, Speaker of the Madras Legislative Assembly, died in Madras on August 3, 1961.

Born in Madras on October 10, 1900, Dr. Udupi Krishna Rao belonged to a well-known Saraswat Brahmin family. He was the son of the late Dr. Rama Rao, who was a leading public figure in Madras in the thirties and was the chairman of the Legislative Council during 1937-39.

Dr. Rao received his early education at Madras and got his M.B.B.S. from the Madras Medical College.

Dr. Krishna Rao besides being a successful private medical practitioner held several offices in public life with distinction. He served the Madras corporation for over 20 years from 1930 to 1951 and was its mayor in 1947-48.

In the 1952 general elections he was elected to the Madras Assembly from the Madras Harbour Constituency and was included in the Cabinet formed by Mr. C. Rajagopalachari. He was Minister of Industries, Labour, Transport and Co-operation till Mr. Rajagopalachari's Cabinet resigned in 1954.

In the 1957 elections, he was returned to the Assembly from the same constituency.

ency and was elected Speaker of the Assembly on April 30, 1957 and remained Speaker till his death.

A Congressman for the last 30 years, Dr. Krishna Rao served as the Chairman of the State Assembly's Estimate Committee and Public Accounts Committee

A keen sportsman and athlete, he was connected with several sports organisation and was the chairman of the Madras Football Association and Madras State Tennis Association.

He edited two journals devoted to medicine.

Dr. Rao was also a member of the Syndicate of Madras University, Chairman of the State branch of the Indian Red Cross and the St. John's Ambulance Association and vice-president of the Indian Medical Association.

SIR SIDNEY HOLLAND

Sir Sidney Holland, former Prime Minister of New Zealand, died in Wellington (New Zealand) on August 5, 1961, after a long illness.

Sir Sidney resigned as Prime Minister and from leadership of the National Party on September 20, 1957, for reasons of health. He was knighted three days later.

Born in 1893 at Greendale, Canterbury, Sidney George Holland, PC, GCB, CH, was educated at West Christchurch District High School. He entered his father's engineering business in 1912. During World War I he enlisted for overseas service and served with the NZEF in France, where he held a commission as an artillery officer.

After the war he and his brother started an engineering firm at Christchurch. For three years he was Chairman, Christchurch Citizens' Association, Vice-President, Canterbury Chamber of Commerce and President, Christchurch Business Men's Club.

In 1935 Sir Sidney was elected to Parliament as a member of the National Party and held his seat until his death. From 1940 to 1949 he was leader of the Opposition, and from 1949 to 1957 Prime Minister. He also held the portfolios of Finance (1949-54) and Police (1954-56). In September 1957 he retired from the Prime Ministership, though he continued as Minister without Portfolio until December that year.

Sir Sidney was made a Privy Council-

lor in 1950, Companion of Honour in 1951 and GCB in 1957. He was selector and manager of the New Zealand hockey team that toured Australia in 1932, and was a life member of the New Zealand Hockey Association.

SCIENTIFIC AND INDUSTRIAL RESEARCH

Under the First Plan, 14 national laboratories were established by the Council of Scientific and Industrial Research. These provided for advanced research in physics, chemistry, metallurgy, fuel, glass and ceramics, food, drugs, roads, leather, electrochemistry, buildings, salt, electronics and botany.

Under the Second Plan, nine more institutions have been established. Among the fields served are biochemistry and experimental medicine, mining, mechanical engineering, public health engineering and aeronautical research.

Regional research laboratories have been set up in Hyderabad, Jammu and Kashmir and Assam.

An industrial and technological museum has been established at Calcutta.

In addition, research centres have been set up for rain and cloud physics, low-shift furnace techniques, gas turbines, essential oils, medicinal plants, wind power and earthquake engineering.

Under the Third Plan, new institutions are proposed to be established under the auspices of the Council of Scientific and Industrial Research for research in such fields as biology, petroleum technology and the development of scientific instruments. Additional co-operative research units for cement, mica, foundry, radio and electronics will be set up.

The programmes of scientific and technological research under the Third Plan aim at, among other things, strengthening the existing research institutions; expanding facilities for research over a wide range and bringing about closer coordination between research carried out in the national laboratories, the Atomic Energy Establishment, the universities, technical institutions and research institutes, research wings of Government Departments, State Government laboratories and industrial establishments.

HOME AFFAIRS

MID-TERM ELECTIONS IN ORISSA

The result of the mid-term Elections in Orissa available fully on July 12, 1961 gave the Congress a clear majority in the State Legislature Assembly for the first time since independence. The Congress secured 82 seats, an absolute majority of 12 in the 140-member House.

The Party position in the Legislative Assembly was: Congress 82; Ganatantra Parishad 37; Praja-Socialist Party 10; Communists 4 and Independents 7.

The position after the last General Election (1957) was: Congress 56; Ganatantra Parishad 51; P-SP 11; Communists 9; Jharkhand Party 5; Independents 8.

The number of votes polled by the different parties this time cannot be compared with their performance in 1957 or 1951. On the two previous occasions there were 54 double-member constituencies, in which each elector enjoyed two votes. The plural member constituencies having been abolished, the number of votes polled cannot now exceed the size of the electorate.

In 1957, although the electorate was 79,80,000 the total number of eligible votes was a little over 1,24,00,000. The actual votes polled aggregated about 42,70,000 or 34.29 per cent of the total.

The electorate this time was just over 84,40,000. As against this, only 29,50,000 valid votes—34.5 per cent—were actually cast.

The following table gives a comparative picture:

	Seats	Votes	%age
		Polled	Polled
Congress	82	13,09,607	44.44
Ganatantra Parishad	37	6,42,822	21.81
P-SP	10	3,01,514	10.23
Communists	4	2,46,465	8.37
Independents	7	4,46,576	15.15

Note: 1961 Electorate: 84,42,849; Votes Polled: 29,46,984; Percentage: 34.5.

Independent votes include: Jharkhand—

36,894; Socialist—18,810; Swatantra—18,080; and Adivasi Unnati Samaj—14,729.

The total number of voters was 85,52,940. and the total votes polled were 31,22,063.

	Seats Contested	Seats Won	Votes Gained
Congress	140	82	1,268,828
G. P.	121	37	1,648,519
P-SP	46	10	334,323
Communists	35	4	233,921
Independents	97	7	,445,035

There were 191,437 invalid votes.

The following table shows party positions over the past nine years:

	1952	1957	1961
Congress	67	56	82
Ganatantra Parishad	31	51	37
P-SP	10	11	10
C.P.I.	7	9	4
Independents	20	7	7
Jharkhand	—	5	—
Socialists	—	1	1
Ind. People's Party	4	—	—
Forward Bloc	1	—	—
Swatantra Party	—	—	1

A seven-member Congress Ministry in Orissa, headed by Mr. Bijoyanand Patnaik, assumed office in Bhubaneshwar on June 23, bringing to an end the President's rule in the State imposed on February 25, 1961. (Mr. Bijoyanand Patnaik was elected leader of the Congress Legislative Party on June 16.)

The President's rule followed the resignation of the Congress-Ganatantra Parishad Coalition on February 21 after it had been in office for 21 months.

The Governor, Mr. Y. N. Sukthankar, administered the oath of office and secrecy to Mr. Bijoyanand Patnaik and his Cabinet colleagues.

The President, Dr. Rajendra Prasad, revoked on June 23 the proclamation issued by him under Article 356 of the Constitution, in relation to Orissa on February 25 imposing the President's rule in the State.

The following distribution of portfolios

among the Ministers was announced after the first meeting of the Cabinet:

Mr. Bijoyanand Patnaik (Chief Minister): Finance, Industry, Mining, Irrigation and Power, Planning, Co-operation and Fisheries;

Mr. Biren Mitra: Political and Services, Community Development, Local Self-Government, Gram Panchayats and Law;

Mr. Nilamoni Routray: Supply, Home, Commerce and Labour;

Mr. Sadashiv Tripathy: Revenue, Excise and Forests;

Mr. Pabitra Mohan Pradhan: Agriculture, Education and Tribal and Rural Welfare;

Dr. P. V. Jagannath Rao: Health and Animal Husbandry; and

Mr. Harihar Singh Mardaraj: Roads and Buildings and Transport.

The Legislative Assembly met on June 26, 28 and 30 when the newly-elected members of the Assembly were sworn-in. Mr. Lingaraj Panigrahi, a member of the State Assembly, administered the oath to the new members.

* * *

LOAN AGREEMENTS FOR THIRD FIVE YEAR PLAN

The following agreements were concluded with India during 1960-61 for loans and grants towards the cost of the Third Five-Year Plan:

Austria: An initial credit for the equivalent of \$14,000,000 for economic development, granted in January 1960, was increased in January 1961 to the equivalent of \$25,000,000.

German Federal Republic: Dr. Hans Wilhelmi (West German Minister for Federal-owned Properties) and Mr. Desai announced in a joint communique in New Delhi on March 2, 1961: (i) that the German Federal Republic would grant India a long-term credit of DM. 40,000,000 (\$95,500,000 at the then current rate of exchange), of which DM. 100,000,000 would not be tied to purchase from Western Germany; (ii) that credits totalling DM. 450,000,000 would be given for the second stage of the expansion of the Rourkela steelworks. An agreement was subsequently signed in Bonn on April 29 covering the 'united' portion of the DM. 400,000,000 credit and DM. 230,000,000 for the Rourkela steelworks.

Poland: An agreement with Poland was signed on May 6, 1960, under which India received credits of Rs. 143,000,000 (£10,725,000) to be used for purchases in Poland, mainly during the Third Five-Year Plan period. Repayment would be made through Indian exports of raw materials and industrial goods.

Soviet Union: An agreement was signed in New Delhi on February 21, 1961, providing for a credit of 112,500,000 roubles (\$125,000,000). A previous credit agreement for 1,500,000,000 old roubles had been signed on February 12, 1960.

United Kingdom: Two agreements for loans by the British Government to India totalling £40,000,000 (Rs. 533,000,000) were signed in New Delhi on May 1, 1961, as follows:

(a) £30,000,000 (Rs. 400,000,000) as Britain's initial contribution to the Indian Third Five-Year Plan, about half of which would be used for individual projects and the remainder for other capital equipment and machinery, all the items to be financed being determined by the Government of India. The projects concerned would include: expansion of the heavy electrical machinery plant at Bhopal (Madhya Pradesh); a fertilizer plant at Nahorkatiya (Assam); a new paper mill at Hoshangabad (Madhya Pradesh); and equipment for a cable factory in West Bengal. The loan was the largest yet made by the U.K. Government as part of its overseas development assistance programme. Repayment will start in 1968 and will be completed in May 1986.

(b) £10,000,000 (Rs. 133,000,000) to support India's balance of payments in 1961-62 and strengthen her dwindling sterling balances. This loan would be immediately available and would be utilized for the purchase of a broad range of goods from Britain. Repayment would start in 1966 and be completed by November 1985.

The loans had been agreed in principle during a meeting between the British Chancellor of the Exchequer, Mr. Selwyn Lloyd, and Mr. Morarji Desai during the latter's visit to London in September 1960. With repayment periods much longer than those for previous loans for India's development plans to over £120,000,000 (about Rs. 1,600,000,000); in addition, negotiations are proceeding for financing the expansion

of the Durgapur steel plant, involving foreign exchange costs up to £20,000,000.

United States: (a) A \$50,000,000 loan agreement with the Export-Import Bank was signed in Washington on January 3, 1961. Intended chiefly for the import of capital equipment for mining and industrial development, the loan will bear interest at 5½ per cent per annum and will be repaid from the sixth year in ten annual instalments.

(b) Under an agreement signed in New Delhi on March 9, 1961, the U.S.A. promised to provide India with 300,000 bales of cotton, valued at \$33,600,000 out of surplus stocks. The agreement was supplementary to that of May 1, 1960, covering food supplies. Payment would be made in rupees; of the counterpart funds, the equivalent of \$14,180,000 would be made available to the Government of India for economic development in the form of a grant, a similar amount as a long-term 4 per cent loan, and the equivalent of a further \$1,800,000 would be reserved for loans to private enterprises in India associated with U.S. firms. In addition, the U.S.A. would pay \$1,500,000 for ocean transportation costs. A similar cotton agreement was concluded in 1960.

(c) The use of a total of approximately Rs. 460,000,000 (\$96,000,000) from rupee counterpart funds (accumulated out of earlier supplies) of U.S. surplus commodities as loans for Indian development projects was arranged under an agreement signed in New Delhi on April 3, 1961. Projects covered were thermal power stations at Chandrapura (Rs. 205,000,000) and Barauni (Rs. 13,000,000), a hydro-electric project at Barapani (Rs. 64,000,000) extensions of the thermal plants at Durgapur (Rs. 34,000,000) and Kanpur (Rs. 9,500,000), and the fertilizer plant at Trombay (Rs. 134,000,000).

(d) The Development Loan Fund announced on April 10, 1961, a \$10,000,000 loan to the Indian National Small-Scale Industries Corporation for the purchase of equipment to be sold to small businesses.

Yugoslavia: An agreement was signed in New Delhi on January 21, 1960, for a long-term credit equivalent to \$40,000,000 for the purchase in Yugoslavia of ships and capital goods for the engineering industries during the Third Five-Year Plan. Talks on the utilization of the credit opened in New Delhi on February 14, 1961.

International Development Association:

It was announced on June 22, 1961, that the I.D.A. had made a loan of \$60,000,000 to India for the development of her road systems, covering half the cost of construction of about 660 miles of roads and 19 major bridges during the first 3½ years of the Third Five-Year Plan. The loan would be for 50 years and interest-free; repayment, beginning in 1971, would be at the rate of one per cent annually for 10 years, and three per cent annually for the remaining 30 years.

* * *

AGREEMENT ON USE OF P.L. 480 FUNDS

According to a press report in New Delhi on July 29, 1961, understanding has been reached between India and the U.S.A. for the utilization of Rs. 122 crores from the accumulated P.L. 480 "counterpart funds" now lying with the Reserve Bank.

This amount, which is to be spent within the next two years, roughly corresponds to that portion of the counterpart funds which is to be given to India as an "out-right grant".

But even after this money is spent, there will be in the U.S. Government's account more than Rs. 250 crores which India can get as a long-term loan for meeting the rupee cost of Plan projects.

Discussions about the utilization of any portion of the "loan amount" will start only after the various agreements about the utilization of the "grant amount" of Rs. 122 crores are signed, presumably by the end of August.

According to authoritative sources, the Rs. 122 crores to be drawn from counterpart funds during the next two years will be used for meeting the local cost of about 15 projects in agriculture, education, health and transport.

By far the biggest share of this amount—nearly Rs. 44 crores—will be spent on education, principally on the construction of a large number of primary schools which will be needed to be built to bring free and compulsory primary education within "walking distance of every village."

Assistance for setting up agricultural colleges, soil conservation stations and food storage installations, etc., will amount to more than Rs. 30 crores, while Rs. 21 crores will be spent on meeting the rupee costs of the national highways programme.

which foreign exchange is being lent by the International Development Association, an affiliate of the World Bank.

Calcutta and Bombay will be among the major beneficiaries of this highways programme, which includes the construction of a large number of bridges.

An allocation of Rs. 25 crores for public health will be devoted mainly to the establishment of medical colleges and eradication of malaria and smallpox.

Under the overall Indo-U.S. agreement, the U.S. Government is paid for the P.L. 480 imports in rupees which are deposited in the Reserve Bank and are called "counterpart funds". These are divided into four categories.

First, the amount which India can get as an outright grant secondly, the amount which India can get as long-term loans; thirdly, the funds which the U.S. Embassy can spend in India on its own establishment; and, fourthly, a fixed portion of the amount, called the Cooley Funds, after the name of the Senator at whose instance these funds were created.

Under the first few P.L. 480 agreements, most of the counterpart funds were in the category which could be loaned to India. But the latest agreement provided that 40 per cent of the funds will be for grants and 40 per cent for loans. The remaining 20 per cent will be divided between the U.S. Embassy's establishment expenditure and the Cooley Funds.

The purpose of the Cooley Funds is to lend money to meet the rupee requirements of those foreign investment ventures in which U.S. firms are interested either wholly or partly.

At present, the accumulated P.L. 480 counterpart funds include Rs. 122 crores for grants; Rs. 253 crores for loans; Rs. 123 crores for establishment expenditure by the U.S. Embassy and Rs. 54 crores by way of Cooley Funds.

When all the P.L. 480 imports contemplated so far are completed, Rs. 37 crores will be available as grants, Rs. 520 crores as loans, Rs. 144 crores for U.S. expenditure in India and Rs. 77 crores for Cooley Funds.

Lack of wealth is easily repaired; but poverty of soul is irreparable.--Montaigne

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FOREIGN EVENTS

MILITARY COUP IN SOUTH KOREA

A group of South Korean military officers staged a lightning **coup d'etat** against the Government of Dr. John M. Chang on the morning of May 16, 1961. By evening all parts of South Korea were calm and whatever resistance might have been organized against the revolutionaries seemed to have collapsed.

It was announced that a Revolutionary Committee under the Army Chief of Staff, Lt.-Gen. Do Yung Chang (38) had proclaimed that it had taken over all functions of the Government.

The announcement said that the Committee would order the arrest of the entire Cabinet of Dr. J. M. Chang, dissolve the National Assembly and ban all political activity.

The Committee's aims were to: (1) Make the anti-communist stand of South Korea stronger; (2) Support the UN Charter and make relations with the United States closer and defend freedom; (3) Wipe out corruption; (4) Build up national economy to lift people out of a hungry and depressed life; and (5) Unify Korea by strengthening struggles against communism.

On May 18, Dr. J. M. Chang came out of hiding and announced the resignation of his Cabinet.

Later in the day (May 18), General Do Yung Chang announced a 15-member Cabinet, naming himself as Premier.

Since he came into power after the General Election in 1960, Dr. J. M. Chang, hampered by a weak majority in the National Assembly, had had to face popular resentment against USA, mounting demand for re-unification with the North and general unrest caused by rapidly deteriorating economic conditions.

In February, 1961, students led a wave of violent demonstrations against the new Aid Agreement with USA and progressive political parties inaugurated a campaign to condemn it. The Government was accused of turning South Korea into an

gave USA close control over the deployment of America's \$200 million annual economic aid to Korea—and thus over the 60 per cent of the national Budget which it represented in revenue—and which granted all U.S. civilians working on Korean aid projects, diplomatic privileges and exemption from taxes.

Anti-American feelings became inflamed again when USA, after years of paying for the upkeep of its 50,000 troops and multifarious civilian organisations in South Korea at the ruinous exchange rate of 650 hwan to the U.S. dollar, obliged Dr. J. M. Chang's Democratic Party Government to halve the official value of the hwan. As prices rose, students and the jobless, once more poured into the streets to vilify Dr. J. M. Chang and U.S.A.

In March 1961, the Government sought to appease the public by asking Washington to make U.S. troops in South Korea liable to trial in Korean courts, but the effect of this demarche was offset by a U.S. threat to hold back \$15 million of U.S. aid if Seoul did not increase electric power charges throughout the country. Popular anti-U.S. manifestations now began to draw crowds 30,000-strong, and inevitably, vicious clashes with the police further fanned public resentment.

Dr. J. M. Chang then introduced a law limiting the people's right to demonstrate, and an Anti-Communist Bill to facilitate the arrest and imprisonment of suspects. The fury of his opponents redoubled, and he was openly accused of vying with Dr. Syngman Rhee in his eagerness to curb public liberty.

Meanwhile, pressure to break the barrier between North and South Korea was steadily increasing. Earlier in the year (1961), Left-wing political leaders started collecting 1,000,000 signatures in favour of national re-unification, and in April, 1961, vociferously demonstrating students demanded postal, economic and cultural exchanges with the communist North Korea. Some politicians began to talk of "neutralizing" Korea, and the progressives opened a

on organizing a mass march to Panmunjon on the Armistice demarcation line for talks with student representatives of the North on national union or confederation.

By April 1961, the situation had become menacing, and Dr. J. M. Chang's intelligence advisers warned that the dissatisfied masses were being increasingly worked upon by agitators infiltrated into the country by at least five Korean communist spy and propaganda organizations operating from Japan. The students and Left-wing politicians, though relatively limited in numbers, could at any time touch off a final and disastrous explosion among the workless and hungry millions.

The Government found itself too weak to meet the crisis. The Army leaders took advantage of the situation and struck on May 16.

President Yoon Bo Sun, on May 19, three days after the coup, resigned from his office, but, on the following day (May 20), withdrew his resignation.

The new Army Government wanted him to remain in office to keep the administration within the frame-work of the Constitution.

The Supreme Council for National Reconstruction—new name for the Revolutionary Committee—arrested on May 20 Dr. J. M. Chang and most of his Ministers. It also dissolved the National Assembly.

The new Cabinet included high-rank-ing Navy and Air Force officers.

The Premier, Lieut.-General Chang Do Yung, re-shuffled his Supreme Council on May 27 so as to give more representation to the young Colonels who, it was stated, had initiated the move for the coup on May 16.

Fifteen Colonels and Lieut-Colonels and 17 Generals made up the new Supreme Council of 32 members, compared to 11 Colonels and Lieut-Colonels and 19 Generals and two Advisers on the original Council.

No one was removed completely from power in the re-shuffle. Room for the additional Colonels was created by having four Cabinet Ministers give up their double representation on both the Cabinet and the Supreme Council.

On the same day (May 27), the Government relaxed Martial Law and Press Control

On June 6, the Supreme Council proclaimed a law entitled the Law on Extra-Ordinary Measures for National Reconstruction. It gave all ruling powers to the Supreme Council.

According to a Government-conducted poll made public in Seoul on June 13, more than 70 per cent of South Koreans support in general the policies of the military Government. Asked for their evaluation of Government policies, only 17.6 per cent gave a "wait and see" reply and 5.8 per cent gave no comment.

Maj.-Gen. Jung Hui Pak, stated to be the real power behind the South Korean military coup of May 16, took over in Seoul on July 3 as Chairman of the Supreme Military Council, replacing Gen. Chang Do Yung who stepped down as Premier.

The Defence Minister, Gen. Song Yo Chan, was named the new Premier after an emergency session of the Cabinet on July 3.

On July 4, a spokesman of the Supreme Council said that as soon as an inquiry, now in progress, had been completed, all members of the Democratic Party (of Dr. John M. Chang whose Government was overthrown in the army coup of May 16) would be arrested. The announcement alleged that five Cabinet Ministers and two high officials of the Chang Government had connexions with the communists.

Three former Cabinet Ministers have been under arrest since the May coup. Dr. Chang and 12 other members of his Cabinet were released after a brief detention and were under house arrest.

It was announced on July 9 that Lt.-Gen. Chang and 43 other officers had also been arrested. While Lt.-Gen. Chang was under house arrest, others had been jailed. According to the Government, they had plotted counter-revolutionary activities and intended to install a former Chairman of the Upper House, Mr. George Taik, as Head of State.

A senior official of the Council, Lt.-Col. Suh Chung Soon, charged that Gen. Chang and his supporters had "deliberately plotted to establish factionalism in their thirst for power and authority."

He charged Gen. Chang with asking Gen. Carter Magruder, former U.N. Commander, to mobilize forces to crush the revolution. Such talk "misled" Gen. Magruder.

runder who issued a statement opposing the coup d'etat.

He said that the plotters attempted to carry out a counter-revolution on July 1, but failed. They had postponed the counter revolution on July 5 and, if unsuccessful, to August 15. He said that if the plotters again failed they intended to flee from Korea by ship from Inchon, 20 miles west of Seoul.

IRAQI-KUWAIT DISPUTE

The U.K. Lord Privy Seal, Mr. Edward Heath, informed the House of Commons on June 19, 1961 that the Anglo-Kuwaiti agreement of 1899 had been abrogated because it was "inconsistent with the sovereignty and independence of Kuwait" and had been replaced by a new agreement of "close friendship" between the British Government and the Sheikhdom of Kuwait. Mr. Heath explained that the 1899 agreement pledged the Sheikh and his successors not to receive representatives of any Power but Britain, nor to cede, sell, or lease any portion of his territory to the Government or subjects of another Power without Britain's prior consent. This agreement, however, had become "obsolete and inappropriate" by the fact that Kuwait had for some time past possessed entire responsibility for the conduct of its international relations and had joined a number of international organizations as a sovereign independent State.

In place of the 1899 agreement, Mr. Heath continued, a new agreement had been concluded, under an exchange of letters between the British Political Agent and the Ruler of Kuwait, whereby (1) relations between the two countries would continue to be governed by "a spirit of close friendship"; (2) when appropriate, the two Governments would consult together on matters of common concern; (3) nothing in the new agreement would "affect the readiness of H.M. Government to assist the Government of Kuwait if the latter requests such assistance"; (4) the agreement would remain in force subject to three years' notice of termination by either side.

In reply to questions by Mr. Denis Healey (Lab.) and Mr. George Brown (Lab.), the Lord Privy Seal said that Britain had undertaken to train Kuwaitis so that a Kuwait foreign service could be formed; that the question of diplomatic relations between Kuwait and other coun-

tries was solely a matter for the Ruler of Kuwait; that Britain would support a Kuwaiti application for membership of the United Nations if such application is made; and that the British representative in the Kuwait would for the time being retain the title of Political Agent, the Ruler having made no request for any change in the existing title.

Kuwait made formal application for membership of the Arab League on June 22. It was stated in Cairo that the application would be considered at the League's next meeting at Casablanca in September.

The Sheikhdom of Kuwait, situated at the head of the Persian Gulf and bounded by Iraq and Saudi Arabia, covers an area of some 6,000 square miles and has a population of about 200,000. Its great oil resources are exploited by the Kuwait Oil Company owned jointly by the British Petroleum Company and the American Gulf Oil Corporation and employing some 10,000 men. There are also important oil resources in the Neutral Zone between Kuwait and Saudi Arabia, concessions in this area being held by the American Independent Oil Co. and the Getty Oil Company with headquarters in Kuwait and Saudi Arabia respectively. The very large oil revenues accruing from the concessionaire have enabled the Kuwaiti Government to carry out large-scale social development including the building of schools, hospitals and dispensaries of the most modern type and a big re-housing programme.

A claim to Iraqi sovereignty over Kuwait was made by General Kassen (Prime Minister of Iraq) on June 25, only six days after the signing of the new agreement between Britain and the Sheikhdom of Kuwait. In a statement broadcast by Baghdad Radio, General Kassem described Kuwait as an "integral part of Iraq", basing his claim on the arguments (1) that Kuwait was part of the province of Basra in the former Ottoman Empire, and (2) that it had been recognized by Britain as such both before and after the treaty of 1899 whereby Kuwait came under British protection. General Kassem said that Iraq did not recognize what he described as the "forged treaty" of 1899, which had been "imposed on Kuwait by the imperialists" in consideration of a payment of 15,000 rupees. He also described the Kuwaiti signatories of the new agreement as "irresponsible people who are under the sway of imperialism".

In the course of his statement General Kassem announced that a decree had been issued appointing the Sheikh of Kuwait as **malik** (prefect) of Kuwait—thereby implying that the Sheikdom was regarded as an integral part of Iraqi territory. It was commented abroad that General Kassem apparently regarded as a precedent an Ottoman decree of 1871 under which the Sheikh of Kuwait was appointed **wali** (governor) of Basra province.

The Ruler of Kuwait (Sheikh Abdullah al-Salem es-Sabah) formally requested British assistance on June 30 under the provisions of the new Anglo-Kuwaiti agreement, following reports of Iraqi troop movements in the Basra area. A similar request was made to Saudi Arabia, whose King had previously sent a telegram to Sheikh Abdullah expressing Saudi Arabia's full support for "fraternal Kuwait". The Kuwait Government had issued a statement on June 26 declaring its determination to defend the territory of Kuwait; emphasizing that Kuwait was "an independent Arab State with sovereignty, recognized internationally".

In London, the Foreign Secretary (Lord Home) stated in the House of Lords on June 28 that the British and Kuwaiti Governments had been in consultation and that the Ruler of Kuwait had been assured of British support if it were requested.

A rapid build-up of the British troops began on July 1, when 600 men of No. 42 Royal Marine Commando went ashore from the aircraft carrier H.M.S. **Bulwark** and airborne forces landed in Kuwait Airport, supported by a squadron of the 3rd Dragon Guards with **Centurion** tanks and by **Hunter** jet fighters from Bahrain. Within a week some 6,000 troops had been moved to Kuwait by air and sea from Kenya, Aden, Cyprus, the United Kingdom, and Germany, with supporting air and naval units from the Mediterranean and the Far East. The first Saudi Arabian units also arrived in Kuwait on July 1, followed on July 7 by 100 Saudi paratroops equipped with U.S. weapons. The Kuwaiti forces themselves had meanwhile been mobilized. All the British and Kuwaiti forces were placed under a joint British-Kuwaiti Command.

Despite temperatures of up to 120 degrees in the shade, and violent sandstorms with winds up to 25 m.p.h., the British troops had by July 7 established a defence

line extending for 60 miles, and about five miles from the Iraqi border.

Sir Charles Elworthy, who had established his H.Q. at Bahrain, said on July 3 that according to the "best intelligence" there was a "general movement" of Iraqi troops southwards towards Basra, including armour. He emphasized that "our position is 100 per cent defensive" and that "we have not the slightest wish to get involved in a shooting match, but that depends on Kassem."

In a further statement of July 7, Sir Charles Elworthy said that there was no fresh news about Iraq's intentions and "nothing to suggest that an Iraqi attack is imminent".

The Iraqi Military Attache in Britain (Brigadier Muhammad Faik), who had just returned from a visit to Baghdad, categorically denied on July 13 that there had at any time been any concentration of Iraqi troops against Kuwait.

The Security Council met in New York on July 2, at Britain's request, to consider a complaint by Kuwait that Iraq was threatening her independence and territorial integrity and peace. The Council adjourned its debate on July 7 without adopting any resolution, and after a British resolution had been defeated by a Soviet veto.

Two resolutions were presented to the Security Council, one by Great Britain and the other by the United Arab Republic.

The voting on the British resolution was seven in favour (the U.K., the U.S.A., France, Turkey, Chile, Liberia, and Nationalist China), one against (the U.S.S.R.), and three abstentions (Ceylon, Ecuador and the U.A.R.); it was therefore defeated by the Soviet veto—the 95th cast by the Soviet Union in the Security Council. The U.A.R. resolution received only three affirmative votes (the U.A.R. the U.S.S.R. and Ceylon), the other eight Council members abstaining. The British resolution was supported by Kuwait and the U.A.R. resolution by Iraq.

The Kuwaiti representative (Mr. Hussein) told a press conference on July 6 that two conditions had to be met before the British forces could be asked to leave Kuwait: (1), the admission of Kuwait to the United Nations, and (2) the withdrawal by Iraq of her claim to annex Kuwait. The Government of Kuwait had formally applied for membership of the United Nations on June 30.

Iraq's claim to sovereignty over Kuwait was not supported by any of the other Arab States, nor by the Arab League. King Saud of Saudi Arabia as stated above, assured the Ruler of Kuwait of his full support and sent Saudi troops to the Sheikdom; King Hussein of Jordan sent a message to the Ruler congratulating him on the achievement of independence by Kuwait following the Anglo-Kuwaiti agreement of June 19; and President Nasser informed the Ruler that the independence of Kuwait was "of great concern" to the United Arab Republic. The Ruler of Kuwait also received messages of support and recognition from Libya and the Sudan.

The Secretary-General of the Arab League (Mr. Abdul Khalek Hassouna) visited Baghdad, Kuwait, and Riyadh during the first ten days of July to discuss the Kuwait situation with the Governments of Iraq, Kuwait, and Saudi Arabia. The Arab League Council meanwhile met in Cairo on July 4 to discuss Kuwait's application for membership and decided to adjourn until Mr. Hassouna had returned from his mission. The meeting was held in camera and no statement was issued, but it was understood that Iraq had opposed Kuwait's membership of the Arab League.

Following Mr. Hassouna's return to Cairo, the League Council met again on July 13 and decided by a majority vote (the U.A.R. and Saudi Arabia opposing) to adjourn for another week to enable delegates to consult their Governments.

In New Delhi, Mr. Nehru said on June 30 that he was "glad that Kuwait has become independent," adding that India had "treated Kuwait as a separate entity for a considerable time past and we propose to continue to treat it as an independent entity." It was subsequently disclosed that the Government of India had sent a communication to Iraq urging a peaceful approach in her dispute with Kuwait.

Kuwait was admitted to membership of the Arab League on July 20 against the opposition of Iraq, whose delegate walked out before the vote was taken. The Arab League Council, which met in Cairo, recorded that Kuwait had been unanimously admitted to the League in view of the fact that the Iraqi delegate was not present when the vote was taken. The Iraqi Foreign Ministry, however, claimed that the League's decision to admit Kuwait was

"null and void"; asserted that it was a "blatant violation" of the Arab League's Charter, which stipulated that a unanimous vote was required for the admission of new members; and declared that Iraq would not relinquish her claim to Kuwait.

AMERICA'S SECOND MAN IN SPACE

On July 21, 1961, Captain Virgil I. Grissom became the second American astronaut, who duplicated the flight of his predecessor, Alan B. Shepard. He landed safely in the Atlantic after being fired above the earth atop a giant Redstone Rocket from Cape Canaveral.

Grissom's speed reached 5,130 miles (8,496 kilometers) per hour, his altitude 118 miles (189 kilometers), his distance 303 miles (491 kilometers), and his duration of flight 16 minutes. Each of these figures slightly exceeds Shepard's marks.

After Grissom's Liberty Bell 7 spacecraft landed in the sea, a mishap caused a few minutes anxiety. Explosive bolts unexpectedly detonated and blew off the side hatch. Grissom deserted the craft as water began pouring in. He was quickly rescued by the recovery team, but the craft sank, carrying down valuable data.

Grissom was picked up safely by a helicopter before the capsule sank. He stepped out on the deck of the aircraft-carrier, "Randolph", smiling broadly and in high spirits.

Grissom's first words on being drawn up into the helicopter were: "Give me something to blow my nose. My head is full of sea water." This apparently indicated that the sea had poured into Grissom's cockpit before he was picked up.

He said he looked through the window of his capsule and "I had such a fascinating view I almost forgot to work."

At one point during flight Mr. Grissom rolled the capsule "like a bullet coming out of a gun." He underwent strains of ten times the force of gravity as he hurled back towards the earth.

Statistically, the Shepard and Grissom flights in space capsules were almost identical. Grissom's maximum altitude was two miles greater than Shepard's. Grissom covered 303 miles—one mile farther than Shepard. Whereas Shepard was in the air—from launching to landing in the ocean—15 minutes, Grissom's time was 16 minutes.

Both astronauts experienced a few seconds more than five minutes of weightlessness during their space journeys. Both men established that it was possible to guide a capsule manually.

The Shepard-Grissom accomplishments differed in two dramatic aspects. While Shepard was easily removed from his capsule in the Atlantic, Grissom underwent a two-minute dunking before he was pulled aboard a helicopter. Secondly, Grissom's capsule began to sink immediately after he emerged from an escape hatch. A helicopter tried unsuccessfully to retrieve the capsule, but the 2-million dollar spacecraft sank to the bottom of the ocean, carrying with it vital films and scientific data.

At a press conference after his flight Captain Grissom said that he was enthralled by the view. He said that from high up in space he could see a band around the earth that went from light blue to dark blue and then to black. As the capsule tilted into its

"turn-around" position he said he could see the horizon for the first time, adding, "It was really fascinating. The earth was very bright and very round. I could see the sun through the window and I was afraid the sun was going to come into my face and blind me."

The 35-year-old father of two sons said his capsule experienced much less vibration than that of the first U.S. astronaut, Alan Shepard, because of changes in the design. Commander Shepard had mentioned having some difficulty seeing the instrument panel at one point because of the vibration, but Captain Grissom said he had no trouble. Grissom said the whole voyage was as exciting as Shepard's so far as he was concerned and concluded by saying, "I would recommend the trip to everyone."

* * *

U.S.S.R. SENDS SECOND MAN IN ORBIT

On August 6, 1961, at 9 a.m. Moscow Time, the Soviet Union launched a new

DID YOU KNOW . . .



Scientists reveal that the world under the sea is far from silent. Fish and other animals make strange noises that can be detected by hydrophones. A fish called a croaker makes a noise like a pneumatic drill. Schools of certain shrimp sound like fat frying.



Tests recently conducted by the Northrup Corporation, a U.S. research firm, revealed that a normal automobile driver alone and in good control of his vehicle registers little or no tension but when accompanied by a nervous, talking passenger who pointed out dangers, his tension lines looked like those at upper right.



Discoveries by American Edwin Land, inventor of the picture-in-a-minute polaroid camera, indicate that scientists since Newton have been completely fooled about the way the eye sees color. By using two black-and-white photographs in combination with various filters, or light sources, Land can produce images of scenes in their original colors.

space ship "Vostok 2" on a round-the-earth orbit with a man aboard. Space ship "Vostok 2" was piloted by Soviet citizen cosmonaut Major Gherman Stepanovich Titov.

The tasks of the flight were: To study the effects on the human body of prolonged orbital flight and descent to the surface of the earth; to study man's work capacity during sustained state of weightlessness.

According to preliminary data, the space ship was put into an orbit close to the calculated one, with the following parameters: Minimum distance from the surface of the earth (at perigee) was 178 kilometres; maximum distance (at apogee) was 257 kilometres; the inclination of the orbit to the equator was 64 degrees 56 minutes.

The initial period of revolution of the space ship was 88.6 minutes. Minus the weight of the last stage of the carrier-rocket the space ship weighted 4.731 kilograms.

On the second revolution around the earth cosmonaut Major Titov transmitted a number of reports from the space ship indicating that the flight was going on successfully.

Two-way radio telephone communications with the cosmonaut on ultra-short and short waves were maintained well.

Observations over the cosmonaut and his operation of the instruments were conducted from the earth over television channels.

Flying over Africa Major Titov sent a greeting to the peoples of Africa from aboard the satellite space ship "Vostok 2".

The condition of the cosmonaut and the operation of the ship's equipment were controlled telemetrically.

Space ship "Vostok 2" flew over London, Ulan-Bator, Sydney, Novosibirsk, Caracas, Sverdlovsk, Calcutta, Washington, Moscow, Chicago, Berlin and Addis-Ababa.

Flying over Europe on the third revolution, Major Titov radioed greetings to the peoples of the Soviet Union and Europe.

At the end of the third revolution, from 12 hours 30 minutes to 13 hours, cosmonaut Titov had a three-course lunch. After that the cosmonaut radioed: "I have had my lunch. I am feeling fine".

At the beginning of the fourth revolu-

tion, in conformity with the flight programme, the cosmonaut took an hour's rest. After that he did setting up exercises and went on with the work envisaged by the flight assignment. Completing the revolution over South America, Major Titov radioed greetings to the peoples of South America.

While he was flying over the territory of the Soviet Union, the television system relayed images showing the calm and smiling face of the Soviet cosmonaut; the multi-channel radio-telemetric system relayed vast amount of scientific information, also detailed data on the functioning of "Vostok 2" systems.

Flying over Kwangchow, Major Titov radioed greetings to the peoples of Asia, and flying over Melbourne, he sent greetings to the people of Australia. At 17 hours (Moscow time) the cosmonaut had his supper.

Continuing the space flight on board the space ship "Vostok-2", Gherman Stepanovich Titov had circled the earth six times by 18 hours 00 minutes. The cosmonaut again switched on hand-controls and the ship obediently followed the pilot's steering. The astronaut continued feeling perfectly well. All equipment on board functioned normally.

In accordance with the flight programme, from 18 hours 30 minutes of August 6 till 2 hours of August 7 was the time earmarked for the cosmonaut's rest and sleep. Therefore the two-way radio communications with him were temporarily discontinued. The radio telemetric control over the work of the apparatuses on the spaceship, the apparatuses ensuring the vital activity of the cosmonaut, continued.

As shown by the data of the radio telemetric control the pulse rate of the cosmonaut during sleep was normal—58 strokes per minute.

By 6 a.m. Moscow Time, continuing his flight in the satellite space ship "Vostok II", the Soviet cosmonaut began his 15th orbit around the earth. The cosmonaut continued to feel fine. After a solid breakfast at 5-45 a.m. the cosmonaut resumed the scientific observations provided for in the programme.

The satellite space ship "Vostok II" carried numerous equipment, including a radio-technical system for trajectorial mea-

surements; multi-channel telemetric systems ensuring objective observation of the state of the cosmonaut and control over the work of all the equipment on board; short-wave and ultra-short wave receiving and transmitting apparatuses, including a tape recorder for recording the cosmonaut's speech and the automatic accelerated reading of the recording on a signal from earth.

During rest breaks, the cosmonaut was able to use a wide-range receiving set for the reception of transmissions on medium and short waves. Television systems enabled systematic observation of the cosmonaut's work. A complex of systems ensured normal conditions for life in the space ship's cabin.

The Satellite space ship made over 17 circuits around the earth in 25 hours 18 minutes, covering a distance of over 700,000 kilometres (434,000 miles—only 43,714 miles less than a return trip to the Moon).

Upon the successful completion of its programme of scientific research, the space ship, in accordance with the approved flight programme, came to land on August 7 at a pre-assigned spot in the Soviet Union, near the historic place where the space ship "Vostok I" piloted by Major Yuri Gagarin, landed on April 12, 1961.

Cosmonaut Major Gherman Stepanovich Titov was born in the year 1935, in the village Verkhneye Zhilino, Kosikhino district, Altai territory, in a teacher's family. He is of Russian nationality.

He graduated from the Nalobikhino Secondary School of the same district in the Altai territory. From 1955 to 1957 he was a cadet of the Stalingrad Military Pilots' Air School which he graduated with the first category and passed his pilot course examinations with the mark "excellent". After graduation he was sent for service in the Leningrad military area.

Gherman Titov is a candidate member of the Communist Party of the Soviet Union. He is married. His wife, Tamara Vasilyevna, was born in 1937. The cosmonaut's father, Stepan Pavlovich Titov, was born in 1910. He was teaching Russian language and literature, and later on, German language at a seven-grade school in the Altai territory. This year he retired on a pension. His mother, Alexandra Mikhailovna, was born in 1914.

Desires should balance with possibilities. Otherwise the foundation is being laid for unhappy, if not neurotic, living. Too often we shoot for the moon, failing to mark and meet intermediate and possible goals. Ambition is vitally necessary to success, but too much of it can pose serious problems and fix dangerous alternatives. Temper your purpose with the sanity of a recognition of your strength and weakness and so achieve balanced living.

—John H. Crowe

He who never made a mistake never made a discovery.—Samuel Smiles

The price of a laugh is too high if it is raised at the expense of property.

—Quintilian

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CRICKET

England-Australia Test Matches

Fourth Test: Quite unexpectedly Australia defeated England in the fourth test match played at Old Trafford, Manchester, on July 27, 28, 29, 31 and August 1 by 54 runs only. Scores: Australia—190 and 432; England—367 and 201.

This triumph, loaded with fluctuating fortunes, thrills and excitement earned the Aussies the right to retain the Ashes with a 2-1 lead having drawn one match and one left to play.

After Australia had played on the last day and amassed a huge total of 432 in their second innings, England was set to get 256 runs in about 230 minutes to win the match. They set about it aggressively and kept well up with the clock. The score stood at 150 for 1 and Dexter batting brilliantly had the ball flying in all directions.

Then he was out after scoring 76—and England were 150 for 2. May went with the score unchanged and from 150 for 1 the score slumped to 163 for 5—and now it was Australia's turn to attack. And it was Benaud who struck and won his side the match.

Benaud took six wickets allowing the opponents to score 70 runs only and Australians, thus, once again became the "proud holders" of the coveted Ashes.

FOOTBALL

Merdeka Soccer Tournament

Indonesia became champions for the first time in the Merdeka Soccer Tournament when they beat Malaya 2-1 in the final at Kuala Lumpur on August 13.

Indonesia scored in the 13th minute through Dishamsjah, and after Malaya had drawn level in the 21st minute the Indonesians fought their way back to take the lead 23 minutes after the interval.

Malaya were the champions in 1958 and 1959, and last year they shared the title with Korea.

RECORDS

Wilma Sets new 100-metre Mark

Wilma Rudolph, the U.S. triple Olympic

gold medallist broke her own world 100 metres record, clocking 11.2 sec. on July 20.

Wilma cut a tenth of a second off her previous world mark of 11.3 sec. at the Olympic Games in Rome in September 1960.

She was running in a special race at a meet between the U.S. and West Germany.

The previous women's world 100 metres record of 11.3 sec. was shared with Miss Rudolph by Shirley Strickland, of Australia, and Vera Krepkina of Soviet Union.

Sylvester Sets Discus Record

Jay Sylvester, of U.S., beat the world discus record with a throw of 60.56 metres (198 ft. 8½ in.) at Frankfurt on August 11.

The official world record is 59.91 metres (196 ft. 6½ in.) set by Edmund Piatkowski, of Poland, in January last year.

SPORTS INFORMATION

A Giant Scoreboard for Kotla

The construction of a "giant" scoreboard, incorporating the "who-is-who" board and complete bowling analysis for both the teams at the Kotla grounds is receiving top priority with the Delhi and District Cricket Association.

The DDCA has begun preparations for staging the third Test between India and the MCC team beginning in New Delhi on December 13.

Mr. M. B. L. Mathur, sports secretary of the DDCA, said at New Delhi on July 15, that the new scoreboard would be installed at a place where it would be visible from all angles on the ground. The present scoreboard stands on the northern side near the general enclosure and faces the main pavilion. The new scoreboard is expected to be double the present size, Mr. Mathur added.

Another scoreboard, smaller in size, would be set up near the main pavilion, diagonally opposite to the giant scoreboard to ensure that people in all directions would be able to follow the scores promptly.

The general stands on the northern side are being reconstructed to accommodate nearly 5,000 people more. With the comple-

tion of these stands the total seating capacity of the ground will be nearly 30,000.

National Institute of Sports

The National Institute of Sports, Patiala, will formally take over the Rajkumari Sport Coaching Scheme on October 1.

The Board of Governors of the National Institute of Sports, which met at Chandigarh on July 10, approved of the All-India Council of Sports' decision to merge the R.S.C.S. with the N.I.S., Patiala. The A.I.C.S. took this decision on June 19 in Delhi.

The Rajkumari Sports Coaching Scheme will continue to function till September 30. After the merger, it will exist as the coaching wing of the National Institute of Sports.

Rajkumari Amrit Kaur, the sponsor of the R.S.C.S. is the chairman of the Board of Governors of the National Institute of Sports.

Itinerary for W. Indies Tour

The Indian cricket team in the West Indies tour will leave Bombay on January 30 and arrive at Trinidad on February 6.

The draft itinerary is:

Vs. Trinidad at Trinidad (February 9, 10, 12, 13); **First Test** at Trinidad (Feb. 16, 17, 19, 20 and 21); vs. Jamaica Colts at Jamaica (Feb. 28, March 1, 2 and 3); **Second Test** at Jamaica (March 7, 8, 9, 10 and 12); vs. Barbados at Barbados (March 16, 17, 19 and 20); **Third Test** at Barbados (March 23, 24, 26, 27 and 28); vs. British Guiana at British Guiana (March 31, April 2, 3 and 4); **Fourth Test** at British Guiana (April 7, 9, 10, 11 and 12); **Fifth Test** at Trinidad (April 18, 19, 21, 23 and 24); vs. Windwards and Leewards Islands at St. Kittee (April 27 and 28); Leave for India on April 30.

Race in Memory of Prince Aly Khan

A horse race in Paris is to be named "Prix Prince Aly Khan" in memory of the international playboy and spiritual leader of Ismaili Moslems who died in a road accident in May last year. The race will be the former annual Grand Prix des Gentlemen which Prince Aly Khan won three times. It will be held at Troublay Hippodrome for the first time on September 23.

Kenya Hockey Team To Tour India

Kenya's hockey team will almost cer-

tainly tour India and Pakistan early next year.

The Hockey Union of Kenya has received an invitation from its Indian counterpart to take part in an International Hockey Tournament in India early next year. The Kenya team has also been invited to tour India for two or three weeks after the tournament.

The tournament coincides with the Congress of International Hockey Association to be held in New Delhi.

Inter-Organisation Championship

The Inter-State Badminton Championships, now renamed as Inter-Organisation Championships, will be played on a zonal basis from this year, according to a decision taken by the Badminton Association of India.

There will be four zones—north, south, west and east. After the zonal matches at different centres, the inter-zone ties and the finals will be held at a place where the National Championships will be staged. Previously the Inter-State and the National Championships used to be held simultaneously.

The Inter-Organisation ties will be decided by the best of 11 matches, instead of the present practice of five.

There will be three men's singles, two men's doubles, two women's singles, one women's doubles, one junior boys' singles, one junior boys' doubles and one junior girls' singles matches.

Europe's Best Goalie

The best European goalkeeper is undoubtedly the Russian Yashin. Of the 140 League matches in which he has been the Moscow Dynamo custodian he has not conceded a goal in 59 games. It must be a great morale booster for the rest of the team to know that they have behind them a keeper who has not let a goal through in just less than half the matches in which he has played in Russia.

Yashin has been named with eight other survivors of the 1958 World Cup finals to be among the 33 selected to train for the next World Cup championship.

Award for Hagen

Walter Hagen, five-time Professional Golfers' Association champion, was named

winner of the first Walter Hagen Award in recognition of his role in furthering international golf competition on July 26.

The award, which was named in Hagen's honour before it was decided to make him the first recipient, is to be presented annually to "the golfer or official, past or present, who has made the most distinguished contribution to the furtherance of Anglo-American Golf."

Hagen, four-time British open champion and seven-time captain of the U.S. Ryder Cup team, was voted the award against a list of nine other nominees that included former "grand slam" champion Boby Jones and former U.S. President Dwight Eisenhower.

Azad Trophy for Bombay University

Bombay won the 1959-60 Maulana Abul Kalam Azad trophy awarded annually by the Union Education Ministry for the university which contributes the largest number of sportsmen and women for the national and international tournaments.

Punjab University, winners, got the second place with 19 points two less than Bombay. Osmania were third with 17 points.

Subba Row to Retire

Ram. n Subba Row, 29-year-old England left-handed opening batsman and Northamptonshire captain, is to retire from first-class cricket at the end of the season.

Mr. K. C. Turner, Northamptonshire secretary, said on Aug. 3, in London that Subba Row had informed the county committee that he was retiring for business reasons.

Subba Row was born at Croydon, Surrey. He is an executive with a London music publishing firm.

Batsman, safe close fieldsman and occasional leg-break bowler, Subba Row has played in 12 Test matches, including all four against Australia this season.

Subba Row played for Cambridge in the university matches of 1951-53. He made his debut for Surrey in 1953 and helped them to win the county championship in that season but then found it difficult to gain a regular place.

He moved to Northamptonshire in 1955 on a special registration and succeeded Dennis Brookes as captain in 1958.

He toured India with the Commonwealth side in 1953-54. He made his Test

debut in 1958 against New Zealand and was in the MCC party which toured Australia and New Zealand in 1958-59 but did not play in any of the Tests.

He played once against India in 1959 and toured the West Indies in that winter playing in two Tests. He made three appearances against South Africa that summer and has played in all four Tests against Australia this season, scoring 112 in the first at Edgbaston. His other Test century was against the West Indies in Georgetown.

Subba Row has scored over 13,000 runs, including 28 centuries and made over 150 catches. His highest score which is also a Northamptonshire record is 300 which he scored against Surrey at the Oval in 1958.

Indian Hockey Team for 'Asiad'

Elaborating the plans in preparation for the Indian hockey teams participation in the Asian Games at Jakarta, Mr. Asnwan Kumari, President of the Indian Hockey Federation, said on June 6 in Jullundur that after the return of Indian Wanderers from New Zealand about 33 players from the entire country would be selected and put through a coaching camp.

After this seven to eight weeks' camp, 18 players would be selected to tour India and play representative matches in chief hockey centres. This team will then break up for about ten days to reassemble at Bombay for participating in an international tournament.

Continuing Mr. Kumari said that after participating in this international tournament the team would take part in a zonal tournament in which players from the four zones of the country would participate, along with the National Games at Jabalpur. After the completion of the zonal tournament, the National Hockey Championship will be held in March, 1962 after which a national team to participate in the Jakarta Games would be selected towards the end of the same month. This team will participate in some of the major tournaments of the country and then after a short tour of the countries neighbouring to Indonesia will participate in the Asian Games.

Mr. Kumar said that an organizing committee had been formed for the international tournament in Bombay and the international convention in Delhi. He said that these functions would cost the Federation more than Rs. 2 lakhs and plans had been made to collect funds.

Mr Kumar said that the Federation was taking good care that players who were selected to represent the country in the Asian Games were not kept under suspense as to their selection. The team would be announced well in advance.

He said that the German Hockey Federation was also sending a strong team to tour this country in January 1962. It was possible that some of the other teams participating in the international tournament, particularly Britain and Kenya, would also be touring the country.

Mr Kumar said that at the recent meeting of the International Hockey Federation it was decided to recognize the Indian National Hockey Championship as a tournament of the same grade as an international tournament. This would facilitate the Indian umpires to preside over the matches in the penultimate round to get international grading.

India lost two of its international umpires in an air crash last year. This concession had been made at the insistence of the Indian representative so that India could build a panel of international umpires again.

Ranji Trophy Fixtures

Eight of the 15th North Zone matches in the cricket championship of India for the Ranji Trophy will be held at Delhi this year.

This was decided at a meeting of the North Zone Ranji Trophy sub-committee held in New Delhi on June 17.

Mr Surjit Singh Majithia, president of the Delhi and District Cricket Association, was in the chair.

Representatives of the S.V. associations attended the meeting which decided the dates and venues of the North Zone league matches.

The following are the fixtures:

East Punjab vs Delhi at Jullundur—Oct 14, 15 and 16. Southern Punjab vs Delhi at Patiala—Oct 16, 19 and 20. Jammu and Kashmir vs E Punjab at Jullundur—Oct 22, 23 and 24. Jammu and Kashmir vs S Punjab at Patiala—Oct 27, 28 and 29. Jammu and Kashmir vs Delhi at Delhi—Nov 1, 2 and 3. Jammu and Kashmir vs Railways at Delhi—Nov 6, 7 and 8. Jammu and Kashmir vs Services at Delhi—Nov 11, 12 and 13. Delhi vs Railways at Delhi—Nov. 11, 12 and 13. Services vs Delhi at

Delhi—Nov 15, 16 and 17. Railways vs Services at Delhi—Nov 19, 20 and 21. Services vs S Punjab at Patiala—Dec 9, 10 and 11. Services vs E Punjab at Jullundur—Dec 13, 14 and 15. S Punjab vs E Punjab at Jullundur—Dec 17, 18 and 19. Railways vs S Punjab at Delhi—Dec 21, 22 and 23. Railways vs E Punjab at Delhi—Dec 25, 26 and 27.

A Blow to South African Cricket

The Imperial Cricket Conference meeting London on July 19 deferred a decision on the membership of South Africa.

The question was referred to the next meeting of the Conference.

Replying to questions, Mr S. C. Griffith, assistant secretary of the MCC, said he thought it unlikely that there would be an additional winter meeting of the Conference which normally meets only once a year.

The New Zealand tour of the South African Republic later this year will take place as arranged, he said, but the five Tests will be unofficial.

Mr Griffith said that he was sure it was the MCC's intention irrespective of what happened in the future to continue to play South Africa both in the Republic and in England.

Mr R. Foster Bowley, attending the conference as observer for the South African Association, was not in the room during the 90 minutes' discussion of his country's position.

He had previously submitted a written statement outlining South African feelings in the matter.

Mr Bowley was present for the discussion of the other matters before the conference and Mr Griffith said "contributed quite a bit to our discussions."

Mr Griffith said the delegate had approached the matter with the welfare of cricket in mind, and had not concerned themselves with any other issues.

Mr Griffith said that South African cricket matches, such as Currie Cup games and other matches of three days' duration or more, would continue to rank as first-class fixtures. He said he thought that any unofficial Tests played in the meantime could well become official Tests retrospectively.

Appointments, Awards etc.

APPOINTMENTS

Mr. B. K. Nehru was appointed Indian Ambassador to U.S.A., in succession to Mr. M. C. Chagla.

Dr. S. Radhakrishnan was sworn in on July 25 to discharge during the illness of Dr. Rajendra Prasad the functions of the President under Article 65(2) of the Constitution.

Brigadier K. A. S. Raja was appointed over-all Commander of all U.N. forces in Katanga on July 22.

Mr. Agha Hilaly was designated on July 26 to replace Mr. A. K. Brohi as Pakistan's Ambassador to India.

The Government of India has appointed **Mr. S. Boothalingam**, who was appointed on July 24 as Secretary to the Ministry of Finance (Department of Expenditure) as member of the University Grants Commission in place of Mr. N. N. Wanchoo.

Mr. M. R. Chopra who was to retire as General Manager of Bhakra Dam on August 18 was appointed Manager of Beas Project for four years on August 7. **Mr. B. R. Palta**, additional General Manager, succeeds Mr. Chopra as General Manager of Bhakra Dam.

Mr. Albert Nassif was appointed Ambassador of Lebanon in India on August 11.

Mr. K. G. Badlani, the present Administrator of Dadra and Nagar Haveli, was appointed as Administrator of the new Union Territory on August 11 by the Government of India.

AWARDS

At the first international Photographic Exhibition, organised by the Royal Thai Photographic Association in Bangkok, **Mr. Mukherjee** of India got the gold trophy for his entry "Controversy".

A stunning, brown-eyed girl from Holland, 19-year-old **Stanny van Baer**, won the 'Miss International Beauty' title on July 28.

The Oxford University conferred an honorary degree of Doctor of Science on July 30 upon **Prof. J. B. S. Haldane**, the author and scientist who gave up British nationality to become an Indian citizen.

Mr. Amitabha Chowdhry, Assistant Editor of the Calcutta Bengali daily "Jugantar" was named recipient of the \$10,000 Magasaysay Award for journalism and literature on August 2. On August 5, **Dr. Raden**

Kodijat of Indonesia was awarded the Magasaysay Award for Government Service. On August 13, a blind American teacher, **Miss Genevieve Caulfield**, was given the Magasaysay Award for international understanding - Asia's Nobel Prize.

VISITORS

Dr. Donald A. Glaser (34) of U.S.A., the youngest living Nobel Prize winner, arrived in New Delhi on July 24.

Mr. Chester Bowles, U.S. Under-Secretary of State and former Ambassador to India, arrived in New Delhi on August 5 on a four day visit to the capital.

Mr. Habib Chatty, Special envoy of President Bourguiba of Tunisia, arrived in New Delhi on August 7 to convey to the Government of India Tunisia's view-point on the Bizerta crisis.

Mr. Muhammadu Ribadu, Nigeria's Defence Minister, arrived in New Delhi on August 14, on a 8-day visit.

OBITUARY

Mr. Charles Martin Anderson (43), head of the political division of the U.K. High Commission in New Delhi, died in a car accident on July 31.

Dr. U. Krishna Rao, Speaker of the Madras Assembly, died in Madras on August 3.

Mr. Bimal Coomar Ghose (56), an eminent economist and PSP member of the Lok Sabha, died in Calcutta on August 4.

Mr. Zoltan Tildy (72), former President of Hungary, died in Budapest on August 4.

Sir Sidney Holland, former Prime Minister of New Zealand, died in Wellington on August 5, 1961.

Dr. Frank Buchman (83), founder of the Moral Re-Armament Movement (MRA), died in Freudenberg (West Germany) on August 8.

Monsignor Reginald Gonsalves (68), Vicar General of the Diocese of Poona, passed away at Poona on August 8.

The sovereignty of man lieth hid in knowledge; wherein many things are reserved that kings with their treasures cannot buy, nor with their forces command.

—Bacon

NEWS

Diary



JULY

15. Spain gave women equal political, professional and labour rights with men, with some minor exceptions.

Pakistan chose Jasmine as its national floral symbol.

16. The Nepalese Government withdrew warrants of arrest against all politicians wanted since Dec. 15, when King Mahendra dismissed the Koirala Ministry and banned all political activity.

17. The U.S., Britain and France rejected Premier Khrushchev's proposal of making West Berlin a free city.

Forty-four officers involved in the alleged plot to overthrow Maj.-Gen. Pak Chung-Hui's regime were released by the Supreme Council.

South Kasai Chief of State Albert Kalonji renounced his title of King and once again became President of the Baluba State of South Kasai.

18. The Kenya Regiment—one of world's most exclusive units as far as the colour bar is concerned—became multiracial.

19. Mr. Nehru declared in Srinagar that India would not tolerate any attack on Kashmir and would counter aggression with all her might.

French and Tunisian troops exchanged fire at Bizerta.

20. President Rajendra Prasad's condition deteriorated following an attack of haematemesis (blood in the vomit).

The Arab League admitted Kuwait as its 11th member; but Iraq refuted the Arab League resolution.

Tunisia broke off diplomatic relations with France.

21. Captain Virgil I. Grissom of U.S.A. became the world's third spaceman, landing safely in the Atlantic after being fired 115 miles above the earth atop a giant Redstone rocket.

French paratroopers dropped on Bizerta after air bombardment of the town.

22. The Security Council called for an immediate cease-fire in Tunisia.

France ordered its troops to cease firing in Bizerta.

President Nasser pledged "unlimited military and political support" to Tunisia against the "oppressive French aggression" in Bizerta.

24. The Gupta Ministry in U.P. was further expanded, bringing its strength to 30.

25. The Union Government announced the upgrading of Delhi city from 'B' to 'A' class for the purposes of compensatory (city) and house allowances to Central Government Servants. Agra and Varanasi were upgraded from 'C' to 'B'. 26 other cities were included in class 'C'.

Senegal decided to break off diplomatic relations with Portugal following incidents on its border with Portuguese Guinea.

26. The Congolese Parliament met for the first time in nearly a year at Lovanium University.

President Kennedy conveyed his firm attention to defend Western rights in Berlin and anywhere else they are regarded as threatened.

27. The old Government of Mr. Joseph Iléo resigned in anticipation of a new Cabinet for Congo.

The ruling Union Federal Party won a two-to-one majority in today's referendum on the new Constitution proposals for Southern Rhodesia.

28. France rejected U.N. intervention in her dispute with Tunisia.

Mr. Nehru inaugurated the Rs. 3-crore second plant of the Hindustan Machine Tools—"a gift to the nation"—at Bangalore.

29. President Ayub Khan said in Karachi that it was not possible for Pakistan to live in peace with India without a solution of the Kashmir issue.

The Soviet Union held out a promise—20-year-Russian-Plan—to its 200 million people of free gas, electricity and other utilities and free food for sections of the population by 1980.

30. The Laotian National Congress adopted an amendment to the Constitution which enabled King Savang Vatthana to become the Prime Minister of a future Government or name any one he chooses for the post.

31. Mr. Harold Macmillan announced that Britain would make a "formal application for negotiations" with a view to joining the European Common Market.

The Foreign Ministers of Philippines, Malaya and Thailand announced in Bangkok the creation of Association of South-East Asia in a document called the Bangkok declaration.

Japan launched its second submarine since the war.

AUGUST

1. Premier Khrushchev warned what he called "lovers of military adventures" to "behave wisely and remember that we have all the means necessary to cool off your hot heads".

The Governor of Andhra Pradesh, Mr. Bhimsen Sachar, inaugurated the first State Law Commission in the country.

2. Mr. Cyrille Adoula's new Congolese Government was invested in office. Mr. Antonie Gizenga, Lumumbist leader was elected one of the three vice-premiers.

Dahomey Republic took over the 300-year-old Portuguese trading post, Sao Joao Baptistada Ajuda on the Atlantic Coast on the eve of the first anniversary of its independence.

The South Vietnam Government ordered the mobilization of all men between the ages of 25 and 33, to build the nations' armed forces against the increasing Communist terrorism.

3. Prime Minister Nehru and other members of the Planning Commission formally signed the final form of the Third Five Year Plan in New Delhi.

Pakistan Government announced recognition of the Algerian Provisional Government, headed by Mr. Ferhat Abbas.

The Union Government renamed the "Department of Archaeology" at New Delhi, as the "Archaeological Survey of India".

4. Russia once again called for the signing of an agreed peace treaty with Germany in notes to the Western Nations.

5. The Western Foreign Ministers agreed in Paris to face Russia's mounting threat to

Berlin with stepped up preparedness for a shooting war but also with readiness to meet the Russians at a Conference table.

Compulsory retirement rules in order to bring new blood in leadership were contained in a new Charter of the Soviet Communist Party published today.

6. Russia sent up into space its second spaceship with a cosmonaut who controlled its flight. The spaceship, Vostok II, with Major Gherman Stepanovich Titov aboard completed seventeen times round-the-world trips when it remained up in the space for 25 hours and 18 minutes. He was circling the earth every 88.6 minutes in an orbit varying between 110.6 inches and 159.7 miles high.

The U.S. Government delivered 10 F-104 supersonic fighters and two trainer planes to Pakistan.

7. The Third Five-Year-Plan was presented to the Lok Sabha by Mr. Gulzari Lal Nanda, the Minister for Planning.

The Western Foreign Ministers talks on Berlin ended in a deadlock in Paris.

It was announced in Patna that Uranium was found recently in Jaduguda in the Singhbhum district of Bihar.

8. The pro-Lumumbist regime of Mr. Antonie Gizenga officially recognized the Leopoldville Central Government of Premier Cyrille Adoula.

10. The Chief Ministers three-day talks opened in New Delhi. They agreed that it should be made a penal offence for any individual or group to advocate secession of any part of the country from the Indian union.

Prime Minister Nehru politely but firmly rejected the demand for a Panjabi Suba. But he said that the government would do everything in its power to encourage the Punjabi language and see that it flourishes in the State.

The Overseas Communications Services set up a printogram service in Delhi. With the development of the printogram service it will be possible to provide international telex service. This will enable a subscriber in Delhi to have immediate teleprinter connection with subscribers in other countries.

11. Dadra and Nagar Haveli, two separate pockets extending over 188 sq. miles, which were under Portuguese occupation for about 175 years, became "de facto" an integral part of the Indian union today.

The two enclaves were liberated on July 21, and August 2, 1954. Dadra and Nagar Haveli are now regarded as a Centrally administered territory under the External Affairs Ministry.

Prince Souvanna Phouma announced the formation of his own political party to be known as the Neutralist Party.

President Kennedy won an important victory in the Senate when it voted to retain the controversial long-range aid plan to assist the developing nations.

12. The three-day Chief Ministers' conference on national integration concluded today in New Delhi after setting up a high-powered national committee, consisting of the Union Home Minister and five Chief Ministers of leading States, to ensure the implementation of the policy of promoting

emotional integration of the people and safeguarding the rights of linguistic minorities.

An attempt to overthrow President Arturo Frondizi of Argentina was crushed today when Government forces arrested two rebel groups that had seized the National Radio Station and a telephone exchange in downtown Buenos Aires.

The ruler of Kuwait and the leader of the Arab League signed a formal agreement in Kuwait on the replacement of British troops in Kuwait by Arab League forces. Kuwait also became a signatory to the Arab League Pact for mutual defence and economic cooperations.

13. The United States Department of Justice lifted a 30-year ban on Henry Miller's controversial novel 'Tropic of Cancer'.

ALL INDIA RADIO

At the time of partition of India in 1947, All India Radio (AIR) was left with six stations at Delhi, Bombay, Calcutta, Madras, Lucknow and Tiruchirapalli.

At present AIR has 60 transmitters, 28 radio stations with 35 studios and four auxiliary studio centres, 28 receiving centres and an educational television centre at New Delhi.

Fifty-seven more transmitters will be installed shortly for extension of the home service broadcast coverage from 37 to 61 per cent of the area and 55 to 74 per cent of the population.

In 1960 in its home services AIR broadcast 1,15,000 hours of programme consisting of music, talks and discussions, dramas and features, news and programmes for special audiences as also AIR's light programme entitled "Vividh Bharati". In the same year the external services occupied 7,000 hours.

AIR broadcasts in all the fourteen major languages mentioned in the Indian Constitution and, in addition, in English, Dogri and Sindhi. There are several dialects spoken in rural areas which are important to AIR because of its rural programmes broadcast from all stations. Fifty-one dialects and eighty-two tribal languages are also used in AIR programmes.

Each linguistic region is served by one after air radio stations. Programmes are keeping in view the artistic, literary

and cultural heritage and aspirations of the region and they try to tap local talent.

AIR operates one of the largest news organisations in the world. Ninety-seven news bulletins ranging in duration from 5 to 15 minutes in 29 Indian and foreign languages are broadcast every day for listeners in India and abroad.

Special audience programmes are addressed to woman and children, schools and university students, industrial workers and rural listeners as also to the armed forces and adivasi areas.

To project significant aspects of India's culture and present the Indian point of view in international events AIR broadcasts programmes in 16 languages for 23 hours per day. These programmes are broadcast to West Asia including Saudi Arabia, Egypt, Lebanon, Syria, Jordan, Iraq, Yeman, South East Asia including Tibet, China, Burma, Indonesia, Fiji, Australia and New Zealand; East, West and Central Africa and Europe.

There is a transcription service attached to AIR which undertakes processing of records of music and spoken-word. Among the latter, AIR is proud to possess some 60 hours of recordings of Mahatma Gandhi which are being preserved for posterity. There are also recordings of Rabindranath Tagore, Sardar Patel, Sarojini Naidu and the music recitals of such old masters as Abdul Karim Khan, Faiyyaz Khan and T. N. Rajaratnam Pillai.

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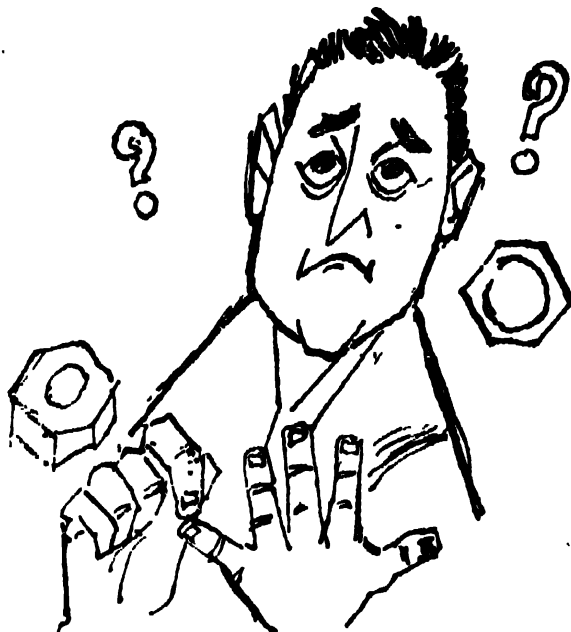
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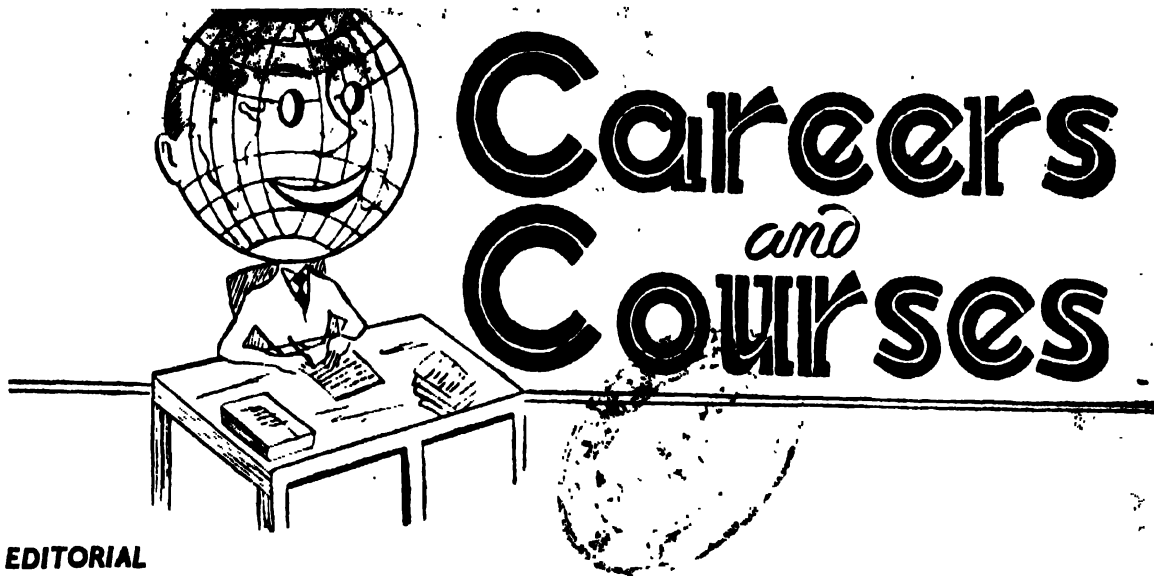
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EDITORIAL

THE PUNJABI SUBA TANGLE

The "fast unto death" undertaken by the Akali leader, Master Tara Singh, to achieve a Punjabi Suba, carved out of Punjabi-speaking areas to form one contiguous unit, and the counter-fast by the Hindu leader, Yogiraj Suryadev, to countermand the Akali demand, have created a serious situation in the Punjab which may result in communal flare-up at any time. The Government of India is in no mood to accede to the Akali demand of further splitting the country and has taken firm measures to maintain law and order in the border State. The sincere and tireless efforts of the mediators have failed to find out any solution to the impasse created by the intrasigent attitude of the parties concerned. The people in the State are outwardly calm and unconcerned but there is an undercurrent of fear and instability running throughout the land. It is an open fact that the people of Punjab have already suffered economically and they are chary to start new industries or other business concerns in the proposed Punjabi-Suba region. The economic and political situation is deteriorating day by day and the people of Punjab are watching with bated breath the outcome of the self-sought agony of a fast by the 76-year-old Akali leader and the counter-fast by the Arya Samaj leader. The present bout of fasts will have a far-reaching adverse effect on the harmonious and amicable relations between Hindus and Sikhs who have been living as "warp and woof of a tapestry" for centuries in the Punjab.

The aspiration of the Sikhs to have a homeland of their own is not a new one but it

has a varied and chequered history. The Akali movement was founded in the early twenties of the present century for religious reforms and "liberation" of gurudwaras (holy places) from the feudal mahants. The continued agitation of the Akalis to get possession of gurudwaras and the massacre of Sikhs at Nankana Sahib (now in West Pakistan) forced the British Government to pass the Gurudwara Act in 1925 and the control of the gurudwaras was put into the hands of the Shiromani Gurudwara Prabandhak Committee for which elections were to be held on adult franchise. This success of the Akali Dal enhanced its prestige and the Dal became the voice of Sikhs and their representative as a religious community. So far the Sikhs and Hindus in Punjab had been living as a single entity; they had been worshipping at the same shrines and following the same religious rites and social customs. By passing of the gurudwaras in the hands of the Akali Sikhs, the first seeds of difference between Sikhs and Hindus were sowed. The Hindu attendance of Sikh gurudwaras fell considerably and the Hindus erected a big mandir at Amritsar—the Durgiana Temple—to keep away their community from the Golden Temple where they had been worshipping daily in large numbers. Then came the Macdonald Award which gave 20 per cent seats to the Sikhs in the legislature and encouraged the recruitment of Sikhs in Army and administrative posts. The gulf between Sikhs and Hindus was widened by the "divide and rule" policy of the British Government. The first cry of a separate Sikh-State was raised before

the British Mission, headed by late Sir Stafford Cripps, which came to India in 1942 to find out a solution to the Indian political tangle. At that time the late Mr. M. A. Jinnah was bent upon carving India to create Pakistan—a separate homeland for Indian Muslims. Mr. Jinnah had offered a sub-national status to the Sikhs if they opted for Pakistan. This offer gave an impetus to the demand of a separate Sikh State. Unfortunately there was no well-defined region where the Sikhs were in majority. The Sikh Community was so evenly distributed and the Punjabi language so widely spoken in the undivided Punjab that it was difficult to demarcate a separate homeland for the Sikhs. The result was that the Sikhs had to opt for India. In 1947, all the Sikhs living in the West of Radcliffe Line migrated to the Indian side and settled in the East Punjab. This gave majority to the Sikhs in some districts and they felt that the demand for a Sikh State had become feasible.

After independence the Congress Government at the Centre made a move to re-organise Indian States on linguistic basis. The Akali Sikhs, under the leadership of Master Tara Singh, began to demand a Punjabi-speaking State. The Hindus of Punjab saw in this demand the old aspiration of the Sikhs to have a State where the latter would be in majority. They opposed the Punjabi-Suba demand tooth and nail. They even encouraged the Punjabi-Hindus to renounce their mother tongue in favour of Hindi. A Hindi Raksha Samiti was formed under the leadership of the Arya Samaj to oppose the formation of a Punjabi-speaking State. This attitude of the Hindus was responsible to create suspicion in the mind of Akali Sikhs who declared that the creation of a Punjabi Suba was essential for the preservation of language, religion and culture of the Sikh minority. The Government devised Sachar formula in which equal status was given to Punjabi and Hindi. The Sikhs were not satisfied and the formula was scrapped in favour of a new Regional Formula. Under this formula Punjab had been divided into Hindi and Punjabi zones and this, to some extent, satisfied the Akali demand. The Akalis again put their demand for a full-fledged Punjabi Suba before the States Re-organisation Commission but the Commission declared that Punjab was a bilingual State and could not be divided into separate linguistic regions.

The agitation for the Punjabi Suba again flared up last year. Elections held in January 1960 to the Shiromani Gurdwara Prabandhak Committee (the body controlling the management of Sikh shrines) resulted in an overwhelming victory for Akali Dal, led by Master Tara Singh, which won 132 of the 140 seats. Master Tara Singh was unanimously elected president of the SGPC on March 7, 1960. Following his victory he announced that he would launch an agitation for a Punjabi-speaking State. On March 8, 1960, the report of the Good Relations Committee, consisting of two prominent Hindu and Sikh educationists, which was appointed in 1958 to study the language problem in the Punjab, was published. It recommended Punjabi in Gurumukhi in Punjabi region. Later in March 1960, the State-Government announced the appointment of a 27-member Committee, headed by the Governor of Punjab, Shri N. V. Gadgil, to recommend measures for satisfactory solution of the language problem. The Akali Dal and the SGPC boycotted the Committee and maintained its demand for division of the State. On May 1, 1960 two separate States of Maharashtra and Gujarat were formed out of the erstwhile bilingual Bombay State. This gave an added argument to Master Tara Singh to press his demand for Punjabi-speaking Suba. Subsequently he was arrested on May 24, 1960 in Amritsar and held under the Preventive Detention Act. His arrest was intended to prevent a march of Akalis to Delhi, which was to have begun under his leadership on May 29, in preparation for a mass demonstration in the Capital on June 12, 1960. His arrest however did not prevent the Akalis to carry on the agitation for a Punjabi Suba. Sant Fateh Singh, Vice-President of SGPC, took over the command and directed the agitation from within the Golden Temple at Amritsar. This agitation created a very explosive situation tending to embitter and disrupt peaceful relations between the Hindus and Sikhs in the State, as well as between rival bodies of the Sikhs. The Akalis resorted to violence both in Delhi and Amritsar and they offered themselves in thousands for arrest. The Communists, the Praja Socialists and the Swatantra party supported the Punjabi Suba demand while the Congress and the Jana Sangh opposed it. Mr. Nehru, in a press statement on June 24, 1960, described the agita-

tion for Punjabi Suba as "misconceived and communal"; he thought it would be "tragic"—both politically and economically—if Punjab, partitioned in 1947, were to be further broken up, but agreed that the use of the Punjabi language should be encouraged.

To give an impetus to the movement, Sant Fateh Singh began "fast unto death" on December 18, 1960, swearing that he would not break it until Punjabi Suba was granted in principle. The Government released Master Tara Singh on January 4, 1961 and Mr. Nehru offered to meet him for talks. Master Tara Singh met Mr. Nehru at Bhavnagar and being satisfied with talks he rushed to Amritsar to apprise Sant Fateh Singh of the outcome of the talk. Sant Fateh Singh broke his fast on January 9, 1961.

Fresh talks on the demand for a Punjabi-speaking State between Mr. Nehru and Sant Fateh Singh opened on February 8 and broke down on May 12, 1961. Master Tara Singh announced on May 22 that he would begin on August 15 (India's independence day) a "fast unto death" for the achievement of Punjabi Suba. The General body of the Akali Dal gave its approval on May 29 to Master Tara Singh's intended fast. Master Tara Singh had decided to fast, instead of reviving the mass agitation called off in January, for two reasons: (1) the Akali Dal had done badly in the 1960 local elections, held during the previous agitation, and another campaign, which might result in the arrest of many of its leaders, might prove to its disadvantage in the 1962 general elections; (2) Sant Fateh Singh's fast and his subsequent talks with Mr. Nehru, from which Master Singh was excluded, has greatly increased his prestige, and Master Tara Singh was therefore anxious to reassert his position as leader of the Sikh Community.

Public bodies and political leaders of all shades appealed to Master Tara Singh not to take the suicidal step of a "fast unto death" to press his demand but asked him to adopt democratic methods for achievement of his Punjabi Suba. But Master Tara Singh was adamant and said that there was no going back from his resolve. "If I postpone my fast, I will be guilty of breach of faith and betrayal of my community," he said. Master Tara Singh began his fast inside the Golden Temple, Amritsar, on August 15. On the same day Yogiraj Surya-

dev began his fast at Amritsar and Swami Rameshwaranand at Delhi on August 16. The two Hindu leaders began their fast to oppose the Akali demand for a Punjabi Suba and "to strengthen Hindu-Sikh unity" (Swami Rameshwaranand broke his fast on August 31, after the statement of Mr. Nehru in the Parliament that there would be no more bifurcation of Punjab on linguistic basis).

In a statement to the press on July 7, 1961, Master Tara Singh said: "To make any demand for a Sikh State is sheer madness. In the interest of the Sikhs themselves, who today form part of the nation, it would be completely suicidal. As for myself, I have often asserted that even if a Sikh State is offered to us, I shall refuse it, and as a patriotic Indian national, I shall consider even such an offer as discrimination against the Sikhs". On July 22, Master Tara Singh assured Hindus that he would safeguard their interests as "strongly as he was fighting for a Punjabi Suba".

Talking to newsmen on July 25, Master Tara Singh said that Hindus and Sikhs were members of the same family and Sikhs did not want to be cut off from Hindus at any cost, as their culture and civilisation was interlinked. "Every Hindu is a Sikh and every Sikh is a Hindu", he said.

On August 6, Master Tara Singh said that the accepted principle of carving out linguistic States could not be withheld from Sikhs because of Hindu opposition. It would mean that Hindus were considered so highly superior that their opinion must carry a greater weight. The Akali leader accused the Government of discrimination against the Sikhs and suppression of civil liberties. On August 13, Master Tara Singh said: "Even after my death, my spirit shall ever hover around to work for a lasting unity of the Sikhs and the Hindus". On August 14, Master Tara Singh said: "The present Punjabi region has already been accepted both by the Akalis and the Government as the Punjabi-speaking area, but adjustments can be a subject of possible discussions. I will, however, not accept the present Punjab as the unilingual Punjabi-speaking State. This will amount to a trick with us because it will not be a factually honest proposition". He said that the Akalis would resist passively any Government attempts to force entry into the gurudwaras. "It may lead to a sort of struggle the Sikhs waged during

the Mughal regime", he added. The formation of a Punjabi Suba, Master Tara Singh explained, would put the Sikhs politically in a better position. He added: "We will be respected and cease to be suspected". In Mr. Nehru's assertion during his talks with Sant Fateh Singh that the formation of a Punjabi Suba would create sentimental barriers against the Sikhs in the rest of India, Master Tara Singh saw a threat to turn the Sikhs out of the other States. "This has added to our determination to struggle for a Punjabi Suba," he said.

On August 22, Master Tara Singh said that it was not a struggle for the Punjabi Suba alone but for the honour of the Sikhs and against discrimination. He reiterated on August 28, that the demand for a Punjabi Suba was a question of honour for the Sikhs.

What was begun as a purely linguistic issue has been turned into a communal issue and the mask of a Punjabi-speaking Suba is taken off the real demand for a Sikh State.

The Government's position vis-a-vis Punjabi Suba has been explained in various statements of Mr. Nehru. He told a deputation of the Punjab Communist Party on August 6 that while he was willing to do everything possible for the development of the Punjabi language, any physical break-up of the present Punjab State would not be in the interests of either the Punjabis or the country. Mr. Nehru said the opposition by a large section of Punjabis to the Suba demand and the harmful effects of a bifurcation of the Punjab on the State's economic development were strong factors against the creation of Punjabi Suba.

Mr. Nehru, on August 9, said that he and his colleagues were all for encouraging the Punjabi language. But he could not understand the demand for a Punjabi Suba on the basis of Punjabi. Except for Hariana, Mr. Nehru said, Punjabi was spoken everywhere in Punjab, and even in Hariana people understood Punjabi as well as Hindi.

On August 21, Mr. Nehru told the Lok Sabha that the Punjab question had shifted from the language issue to somewhere else. Even originally it was not a language issue, but a communal issue in the guise of language. Again on August 28, Mr. Nehru told the Lok Sabha that he could not agree to the Punjabi Suba demand because it was "harmful in the principle and application."

But he was prepared to hold a high level inquiry to investigate the charges made by the Akali leaders that there was discrimination against the Sikhs. He was also willing to inquire into the working of the regional formula and consider giving more powers to regional committees, though not powers of legislation.

Mr. Nehru stated in the Rajya Sabha on August 30 that if a Punjabi Suba were formed it would bring harm to the Punjabi language by limiting its area, divide Punjab, release communal and fissiparous tendencies, adversely effect Punjab's economy and tear to shreds the social life of the people. It would be the very reverse of national integration.

With Mr. Nehru's categorical refusal to the preposterous demand of Master Tara Singh, the Akalis have become desperate and have hurled all sorts of invectives on Mr. Nehru. It has become difficult for Master Tara Singh to save his face and break his fast. On September 1, Master Tara Singh made a ridiculous proposal by offering to call off his fast if the Punjabi Suba issue were raised "effectively" in the United Nations. Denial of Punjabi Suba, he said, was based on discrimination against the Sikhs and was a fit subject to be raised under the human rights charter. When he was made to understand that the Suba issue was an internal problem and cannot be discussed in the United Nations, he proposed arbitration on the Suba issue by a neutral body of men "not under the influence of Mr. Nehru". The Government is not prepared to have any arbitration on the Punjabi Suba issue.

There seems to be no solution of the Punjab tangle at present. The Government is not prepared to yield to coercion and blackmail by fast. There will be no end of demands and divisions if once the Government yields to the present agitation for a Punjabi Suba. The only issue at present is how to save the life of Master Tara Singh. His services to the nation cannot be forgotten in the din of a communal demand. He is a sincere and honest man though he sometimes expresses wrong convictions. It is hoped that Master Tara Singh, in the wider interest of national unity and communal harmony, will himself see the light of reason and sanity and abandon the path of self-destruction which he has taken.

Role Of The United Nations

By Mr. DAG HAMMARSKJOLD

Eight years ago I was inducted into my present office, to which I had been catapulted without previous soundings, indeed, without any pre-warning. I felt that it was my duty to accept it, not because of any feeling of confidence in my personal capacity to overcome the difficulties which might arise, but because, under the conditions then prevailing, the one to whom the call had come seemed to me in duty bound to respond.

The tumultuous situation that faced me at the very outset has proved not to be unique. It has been repeated several times in the past few years. The other day I read a book by Arthur Waley—well-known as one of the great interpreters of Chinese thought and literature and as one of those great students of humane letters who have so splendidly enriched our cultural tradition. In his work Waley quotes what an early Chinese historian had to say about the philosopher Sung Tzu and his followers, some 350 years B.C. To one who works in the United Nations, the quotation strikes a familiar note. It runs as follows:

"Constantly rebuffed but never discouraged, they went round from State to State helping people to settle their differences, arguing against wanton attack and pleading for the suppression of arms, that the age in which they lived might be saved from its state of continual war. To this end they interviewed princes and lectured the common people, nowhere meeting with any great success, but obstinately persisting in their task, till kings and commoners alike grew weary of listening to them. Yet undeterred they continued to face themselves on people's attention."

Is this a description of a quixotic group, whose efforts are doomed to failure? The wording, with its tone of frustration, may lead us to think so. However, I believe that this interpretation would be wrong. The historian tells us about a group engaged in a struggle he considers very much worth-while and one which will have to go on until success is achieved.

The half ironical, half sad note which he strikes indicates only his knowledge of the difficulties which human nature puts in the way of such work for peace. His pessimism is tempered by the mild sense of

humour and the strong sense of proportion of a man seeing his own time in the long perspective of history. We can learn from his attitude, both in our efforts to move towards peace and in our work for universal recognition of human rights.

We know that the question of peace and the question of human rights are closely related. Without recognition of human rights we shall never have peace, and it is only within the frame-work of peace that human rights can be fully developed.

In fact, the work for peace is basically a work for the most elementary of human rights; the right of everyone to security, and to freedom from fear. We, therefore, recognise it as one of the first duties of a Government to take measure in order to safeguard for its citizens this very right. But we also recognise it as an obligation for the emerging world community to assist Governments in safeguarding this elementary human right without having to lock themselves in behind the walls of arms.

The dilemma of our age, with its infinite possibilities of self-destruction, is how to grow out of the world of international security, based on law. We are only at the very beginning of such a change. The natural distrust in the possibility of progress is nourished by unavoidable set-backs and, when distrust is thus strengthened, this in turn increases our difficulties.

The effort may seem hopeless. It will prove hopeless unless peoples and Governments alike are willing to take smaller immediate risks in order to have a better chance to avoid the final disaster threatening us if we do not manage to turn the course of developments in a new direction.

The United Nations finds itself in a difficult stage of its development. It is still too weak to provide the security desired by all, while being strong enough and alive enough effectively to point out the direction in which the solution must be sought. In its present phase the Organisation may look to many like a preacher who cannot impose the law he states or realise the gospel he interprets. It is understandable that those who have this impression turn away in distrust or with cynical criticism, forgetting that set-backs in efforts to implement an ideal do not prove that the ideal

is wrong, and overlooking also that at the beginning of great changes in human society there must always be a stage of such frailty or seeming inconsistency.

It is easy to say that it is pointless to state the law if it cannot be enforced. However, to do so is to forget that if the law is the inescapable law of the future, it would be treason to the future not to state the law simply because of the difficulties of the present. Indeed, how could, it ever become a living reality if those who are responsible for its development were to succumb to the immediate difficulties arising when it is still a revolutionary element in the life of society?

The United Nations is something definite also in the sense that the concepts and ideals it represents, like the needs it tries to meet, will remain an ineluctable element of the world picture. However, that does not mean that the present embodiment of the groping efforts of mankind towards an organised world community represents a definite shape for all time. The United Nations is, and should be, a living, evolving, experimental institution. If it should ever cease to be so it should be revolutionised or swept aside for a new approach.

The growth of social institutions is always one where, step by step, the form which adequately meets the need is shaped through selection, or out of experience. Thus an effort that has not yielded all the results hoped for has not failed if it has provided positive experience on which a new approach can be based. An attempt which has proved the possibility of progress even if it has had to be renewed again and again, and in new forms or setting in order to yield full success.

When we look back over the experiences in the United Nations over the past few years, we may differ amongst ourselves as to the wisdom of this or that particular stand and we may have doubts about the end result of this or that step. But I think we can't dispute the value and historical importance of certain developments.

First of all, it proved possible in an emergency to create for the first time a truly international force. This Force, although modest in size and, for constitutional reasons, also modest in aim, broke new ground which inevitably will count in

future efforts to preserve peace and promote justice.

Lasting peace is not possible without recognition of fundamental human rights and that human rights cannot reach their full development unless there is peace. The United Nations cannot lay down the law for the life within any national community. Those laws have to be established in accordance with the will of the people as expressed in the forms indicated by their chosen constitution. But just as the United Nations can promote peace, so it can, in joint deliberations, define the goals of human rights which should be the laws of the future in each nation. Whatever the distance between these goals and the everyday reality we meet all around the world, it is not vain thus to set the targets as they present themselves to the most mature political thinking of our age.

The Universal Declaration of Human Rights, adopted by the General Assembly thirteen years ago, is not, of course, a treaty and has in itself no force of law, but as "a common standard of achievement for all peoples and all nations" it crystallizes the political thought of our times on these matters in a way influencing the thinking of legislators all over the world. The relationship of man to society is a relationship for which every generation must seek to find a proper form. In a world where the memory is still fresh of some of the worst infringements on human rights ever experienced in history, the Declaration should give direction to those who now carry the responsibility for a sound development of society.

The United Nations has for years struggled with the problem how to translate the Declaration of Human Rights into the text of an international convention or conventions. It is not surprising that in a world with very different cultural traditions, and among countries showing very different degrees of advancement of social institutions, such a translation has proved difficult. But the failure so far to reach agreement over the whole field should not lead us to believe that the word to realize the fundamental human rights has come to a standstill. The decisive fact in the end will not be the text of an international convention, but the transformation of society through growing recognition of the principles in the life of the peoples.

The work for peace must be animated by tolerance and the work for human rights by respect for the individual. A student of the growth of human rights through the ages will recognize its close relationship to the development of tolerance inspired by ethical concepts of religious origin. Attempts are made to link the development of human rights, exclusively to the ideas which broke through to predominance in the age of enlightenment. However, to do so means to me to overlook the historical background of those ideas. It means also cutting our ties to a source of strength that we need in order to carry the work for human rights to fruition and to give to those rights, when established, their fitting spiritual content.

To some, the word "tolerance" may sound strange in a time of "cold war" and of negotiations "from positions of strength;" it may have an overtone of meekness or appeasement. And yet, have we reason to believe that what was true in the past is no longer true? It is not the weak but the strong who practice tolerance, and the strong do not weaken their position in showing tolerance. On the contrary, only through tolerance can they justify their strength in the face of those counteracting forces that their own strength automatically sets in motion.

I am sure that this holds true of all those in the present world situation who may be, or may consider themselves to be "strong", be it the industrialized West in relation to the underdeveloped countries, be it the Powers whose military resources give them key positions, be it those who have achieved a state of democracy and of recognition of human rights toward which others are still groping.

I remember in this context words from another translation by Arthur Waley—this time from Tao Te Ching. Its paradoxical form and mystical background should not lead us to overlook its realism: "Heaven arms with pity those whom it would not see destroyed."

Over the ages and over the contents, these words join with those of the Psalmist: "There is mercy with Thee; therefore shalt Thou be feared."

Tribal Welfare In India

The total population of scheduled tribes, according to 1951 census and the list revised in 1956, was estimated at 22.5 million. The "denotified" tribes (formerly described as 'criminal' tribes) comprised 4 million.

To assist tribal population to reach a level of well-being comparable to the rest of the community, the Constitution has provided for special safeguards. These include reservation of seats in the Legislatures, recruitment of tribal candidates to services and posts in the Union and State Governments, administration of scheduled and other tribal areas, appointment of a Special Officer to investigate into the working of the safeguards and appointment of a Commission to report on the administration of the scheduled areas and the welfare of the tribes.

The Second Five Year Plan provided for an expenditure of Rs. 43 crores on welfare of scheduled tribes and Rs. 2.89 crores on welfare of "denotified" tribes as against Rs. 19.83 crores and Rs. 1.10 crores respectively during the First Plan period.

The programmes falling in the Central sector covered schemes of special importance for the advancement of scheduled tribes. They include tribal development blocks, improvement in shifting cultivation, settlement of shifting cultivators etc. etc.

Schemes carried out during the last decade considerably supplemented benefits accruing from development in different fields such as agriculture, co-operation, irrigation, small industries, communications, education, health, housing and rural water supply.

The main agency for execution of tribal welfare programmes are the State Governments, but voluntary organisations engaged in welfare work are given liberal grants-in-aid. The Government of India gave grants to eight non-official agencies of an all-India character to further welfare of the scheduled tribes.

The Third Plan incorporates provisions to improve welfare programmes, particularly strengthening and reorganisation of the administrative set up to protect interests of the tribes in the newly industrialised areas.

THE TORMENT OF ANGOLA

By THE REV. CLIFFORD J. PARSONS

Formerly a Missionary in Angola

Just as 5 January 1959, the date of the Leopoldville riots, and not 30 June 1960, the date of formal declaration, marks the beginning of their independence for the Congolese, so 15 March 1961 may well mark the beginning of independence for Angola. On that day the first popular African uprising against Portuguese hegemony in recent times took place. Its outcome is still in the balance; but whatever the immediate results, there can be no doubt that this is a turning point. Things will never be the same again.

In the history of peoples, the forlorn hope has often served as a fuse for the finally successful revolution. The way may be arduous, the odds seem insuperable, but conviction and determination bring their inevitable reward. At such times the innocent on both sides will inevitably suffer, and none can certainly regard with equanimity the horrors of the present struggle in Angola.

It is a major irony that a country which has prided itself on a non-racial policy of 'integration' should have witnessed the most bitter struggle between races in Africa south of the Sahara—so far. Looking across the South Atlantic, towards the Brazilian giant which grew of the same matrix, one cannot but sorrow over the mediaeval spirit that the last 35 years have brought to Portugal. Had a strenuous endeavour been made to implement the traditional policy of non-racialism, Angola might well by now have presented to the world the most harmonious race relations in Africa, instead of the cruel conflict which has shocked even her closest friends.

In spite of government statements claiming the fullest awareness of what was brewing, the attacks when they came took the settler population of Angola by surprise. Years of propaganda, insisting that it could not happen there, had persuaded them that all was well, that Africans were not the resentful victims of injustice, and that in any event they had no weapons and no leaders. How wrong the propaganda was!

Clandestinely the Union of the Populations of Angola (U.P.A.) had built up its organisation, based on necessity outside the

country. With some naivety, they made it known that something was going to happen on 15 March; but the authorities refused to take the warning seriously, so that the initial onslaught was a terrifying success. Plantations, commercial centres and isolated government outposts were attacked and destroyed from the Congo frontier down to within a hundred miles of Luanda. At least 500 white and coloured people were killed, many of them with the long pruning knives or matches used in plantation work. Women and children were not spared. There were mutilations. It was a chilling demonstration of what the release of long pent-up feelings can do.

The natural reaction of the white community was to defend itself. Military forces in the country were weak and widely scattered. The administrative authorities armed the civilian population, and throughout the country bands of vigilantes were formed. Their reprisals against Africans have not been as widely publicised as the atrocities committed by the insurgents, but the authorities have admitted their own difficulty in restraining counter-measures by the civilians. For at least a month the situation was practically anarchic, with the government holding the reins loosely in the hope that passions would work themselves out. In Luanda there was nightly terror in the locations where Africans, many of them educated and responsible citizens, were hauled from their homes and shot. In the interior wholesale arrests and summary shootings have resulted in the panic flight of most of the African population into the hills, ravines and forests, or across the border into the Congo. By the middle of May press reports widely quoted an estimate of 20,000 for the number of Africans killed in retaliation and repression.

With the approach of the dry season—which extends from May to October—the government has announced its plan for a ruthless campaign "to exterminate the terrorists," first by burning the eight foot high bush grass, and then by bombing and strafing the forests in which the insurgents will be compelled to take refuge. This scorched earth policy is bound to be indiscriminate. With universal panic, women and

children, the aged and the infirm, have uniformly fled from their villages, many of which have been burned or bombed out of existence. The answer that is commonly given to those who appeal against such a proposal is: "They started it. We must pay them back in their own coin."

It is the purpose of this article to examine the truth of such a statement.

Portugal's relations with Angola began in 1482 when Diego Cao discovered the mouth of the Congo river, landing on the south bank of the estuary, close by S. Antonio do Zaire. Nine years later Roman Catholic priests settled at Sao Salvador, the capital of the ancient Kongo kingdom where in 1534 there were laid the foundations of the first Christian church in the southern hemisphere. Its ruined chancel still stands, a monument to the faith and courage of those early missionaries. Luanda, the modern capital, was not founded until 1575, and Benguela in 1617. In 1580 Portugal became a vassal of Spain and, in the next 60 years, lost much of her overseas empire. In 1640 she reasserted her independence; but in the following year the Dutch sieged Luanda, holding it until 1648, when Correia de Sa e Benevides recaptured the city with reinforcements brought from Brazil. By this time Portuguese influence at the Kongo court had declined and in 1660 the king revolted against his foreign overlord, only to be defeated in 1666 at the battle of Ambuila. From this time forward the Portuguese concentrated their interest further south, although missionary activity continued at the Kongo capital, Sao Salvador, well into the 18th century.

In 1763 Pombal expelled the Jesuits from Portugal and her dominions, thereby bringing missionary activity practically to an end. Since the spiritual arm was the most venturesome in seeking to penetrate the hinterland, the next hundred years saw little progress towards laying bare the secrets of the continent. Administrative and commercial interests, living mainly by the slave trade, as did other maritime peoples of the day, adhered to the coastal regions and suffered the corrupting influences that all such trading must involve. The journeys of Capelo, Ivens and Serpa Pinto from 1877, courageous and resourceful as they were, were dictated partly at least by political considerations; but they came too late to ensure acceptance for the claim of effec-

tive occupation made at the Berlin Conference.

In the scramble for Africa, Portugal felt herself unjustly treated. She was still left with the two extensive territories of Angola and Mozambique, which she desired to make into one by the acquisition of what is now Southern Rhodesia. A British "Ultimatum" to Portugal in January 1890 stopped the Portuguese advance, but the patriotic reaction was such as nearly to bring down the monarchy in the first republican revolt of 1891.

In the 1890's Portugal's financial distress became acute, and it was commonly believed in the chancelleries of Europe that she would have to sell her colonies. In August 1898 Britain and Germany signed a convention, whereby spheres of influence were assigned to the two countries, should Portugal have to contract a loan with her colonies as security. The next decade witnessed increasing political tension between monarchists and republicans, resulting in the regicide of 1908 and the end of the monarchy in 1910. For 16 years Portugal tried democracy; but coming so ill prepared, and in face of steady opposition from the Roman Catholic Church, the country slipped increasingly into bankruptcy. So came the coup of 1926 and the beginning of the present regime. Two years later Salazar entered its government as Minister of Finance. By his financial competence and the most stringent control over public expenditure, he had within five years extinguished the public debt. The world economic crisis prevented any large-scale investment in the overseas territories during the thirties, while the Second World War and the Allied blockade of Germany delayed still further the internal development of Angola.

Portugal's neutrality, however, laid the foundations for her economic recovery. Trading agreements were made with both sides, and the leasing of the Azores to the Allies brought a considerable financial reward to Portugal. When the war ended and trade once more flowed freely among the nations, timber, vegetable oils and foodstuffs found a ready market and made the escudo one of the hardest currencies in the world. Principal amongst Angola's exports was coffee, which at one stage provided 60 per cent of Portugal's foreign exchange. The money flowed into Angola, and

the territory at last began to attract the investment that its potentialities deserved. The port of Luanda was enlarged and modernised. Hydro-electric schemes provided electric power for Luanda, Lobito and Mossamedes. The road system was improved by the construction of concrete bridges to replace the antiquated ferries and flimsy wooden culverts that had served for the pre-war volume of traffic. The flow of white immigrants increased as news of Angola's wealth was spread in Portugal. In 1940 there were 40 000 settlers, by 1950 79,000, and by 1960 an estimated 200,000. Africans benefited indirectly from the increased wealth of the country and directly through improved health services (the anti-sleeping sickness campaign with the new drug pertainidine was a notable undertaking), and higher prices obtainable for the crops produced by peasant agriculturalists. Some few even acquired wealth through their ownership of coffee plantations.

Why then have the Africans revolted? The official view is provocation from without and Protestant complicity from within. The real reasons are economic, social, political and human.

Economic

Amongst the trading community there are to be found unscrupulous men whose exactions and dishonesties only serve to awaken resentment in their customers. It was such treatment that led to the Bailundo rising of 1902.

Resentment too had been caused by the expropriation of land, particularly in the coffee-bearing regions of the Daminhos (Cuanza-Norte), Camero and São Salvador, all three districts in which the initial onslaught of 15 March was particularly severe. Traditional African rights were not respected, save where regular and consistent cultivation could be proved. All land was, legally, vested in the State, which granted concessions to those who could prove capacity to develop their holdings.

Exceptionally, the government gave direct assistance to colonists as in the striking and much publicised settlement at Cela between Lobito and Nova Lisboa, but in most instances outright grants of land were made to immigrants from Portugal. Abuse also crept into the negotiations that preceded the granting of such concessions. Government officials (who by standards in

other parts of Africa are very poorly paid) have often behaved with little regard for the 'mission' of Portuguese civilisation. Graft, corruption and deceit, in spite of the valiant efforts of some high-minded administrators, have angered and embittered Africans, whose feelings about the inalienability of land are as strong and ineradicable as Naboth's.

But even more fatal in its impact upon a African opinion than commercial trickery or the expropriation of family lands has been the system of 'contract' labour, a subtle euphemism for what in other places is called forced labour. Under this system all able-bodied males whose holdings fail to attain certain standards of size, efficiency or productiveness or who do not hold an artisan's licence, are recruited forcibly for periods of six months at least in any one year either for public works or for service with private employers. In November, 1955, when Portugal entered the United Nations there was a momentary relaxation of the obligatory principle but anxiety over the possible threat to the economy of the country was such that measures were soon enough taken to ensure that flow of labour should not be impeded by any such aberrations as a free contract. All the same, Portugal's adhesion to the United Nations did mean more rigorous control over the employers of contract labourers. Payment began to be made at central administration, offices rather than at district "posts", and a proportion of the men's wages had to be deposited with the administrator before men could be recruited. Medical care was guaranteed and the issue of clothing, blankets and rations supervised. But the system was understandably hated and, although some habituated themselves to the routine and became "voluntary" workers, the vast majority bitterly resented their loss of personal freedom and the consequent inability to develop their own holdings. Many Africans in the frontier areas crossed into the Congo, and Ovimbundu labourers (Bailundos, as the Portuguese call them) from central Angola were sent to the coffee plantations of the north.

Social

Portugal had prided herself on her non-racial tradition and the policy of assimilation. "This," said the Portuguese, "sets us apart from all other colonisers. We are colour-blind. Look at Brazil. Look at Angola." And until 1953 the Africans, on

some of them, may even have believed this. In that year, the legislation governing the assimilation of indigenous populations was codified in a new statute. The Status of "assimilado" was abolished, and instead, Africans qualifying for assimilation were, if successful in their application, accorded the status of full citizens. Unfortunately, the statute also provided in its provisions for the withdrawal of citizenship from Africans who might possess it, and in any assessment of recent events this factor clearly has great significance. A European can lose his citizenship rights, but he can never lose his citizenship. Such was not the case with Africans. Although Africans continued to make applications for citizenship, doubt had been sown in the back of their minds, and doubt that was nurtured by the obvious reluctance of government officials to assist Africans in gaining the newly offered status. Difficulties seemed constantly to be made over the provision of legal birth certificates and other essential documents. The scale of remuneration, the standard of housing and the grade of education were persistently questioned. Africans often had recourse to shady lawyers in order to get over these difficulties, and many could have said, as Paul's centurion said: "With a great sum obtained I this citizenship." The requirements for assimilation were heavily loaded in favour of the urban dweller, although for peasant farmers the title of 'agricultor' brought certain privileges which several thousand Africans were glad to obtain in the regions about Carmona and the Dembos. But, by and large, Africans in the last five years have come to regard the policy of assimilation as a sham and a snare.

Without doubt too the extensive immigration of recent years largely contributed towards creating this impression. A growth of at least 100,000 within a decade, apart from natural increase, meant that the European population as a whole lacked much in experience of African life and conditions. The early settlers included many shrewd and hard-working peasants from Madeira and rural Portugal, who by their own efforts had carved out a livelihood for themselves without gratuitously prejudicing African interests. In many places, even as late as 1955, human relationships between the races were by no means unfriendly. After all, the economic and political disabilities endured under the Salazar regime were

common to both black and white. But the new wave of immigrants introduced a new spirit into the country. Many came with the object of getting rich quickly, and most wished to stay in the security of the towns. (In Luanda recently I talked with a taxi driver who had only been outside Luanda once in 14 years!) Even the government has had its problems with square settlers who would not fit into the round hole of Ceta. There were, of course, exceptions.

At the same time the economic recession of the past few years struck Angola. The price of coffee dropped. The demand for certain farm products diminished. The fishing industry in the South collapsed. And all this took place at a time when an increasing number of Africans were leaving mission and other private schools in search of advancement. Some of these came up against colour prejudice, and the rebuff was disillusioning. Unemployment quickened the spirit of competitiveness. Angola was ripe for development, but the resources were inadequate.

Political

Political considerations were, of course, largely to blame for this state of affairs. Portuguese are kindly and generous people, but political xenophobes. It is for this reason that they have placed so many restrictions on the entry of foreign capital. They fear the political miasma that hovers over loans and economic aid. Yet in a world hurtling along the road of material progress, Angola cannot expect its people to stand by and wait for the leeway of centuries to be reduced. Both black and white have been infuriated or constantly madly irritated at the slowness in the development of Angola's potential. Everyone's patience has its limit.

There is, too, the more direct political resentment at the continuing iron grip of the regime upon every aspect of daily life. The Portuguese are by nature independent and relaxed. They detest dictatorship and have been uneasy under Salazar's paternalism for many years. Ruthless measures with political opponents gradually crushed resistance to the New State, while Salazar's financial and diplomatic skill brought some of his opponents to a reluctant admiration. But in the past decade resistance had grown even stronger, and the secret police (PIDE) ever more stringent in its counter-measures. In 1958 the anti-government candidate for

the presidency, General Humberto Delgado, polled 20 per cent of the votes in Angola; 40 per cent abstained. The methods adopted by the government to secure the remaining 40 per cent were, to say the least of it, unorthodox. Following this election, the secret police were introduced into Angola and security measures tightened up, so that many Portuguese, who had emigrated to Angola because of the freer air that was to be breathed there, glanced over their shoulders when talking in the cafes, while suspicion and fear mounted.

Coinciding with increased political repression came the beginnings of African liberation from colonial rule, beginning with Ghana in 1957 and reaching the northern border of Angola in June 1960. As early as October 1959 pamphlets were struck on buildings in towns and villages throughout the northern border country, demanding independence for Angola in 1960. A forlorn hope? At that time Congo independence looked at least 5 years away. It came in 9 months. Small wonder, therefore, if Angola's African refused to admit that independence for them was on some far-off, invisible horizon.

Human

There remains a final and compelling reason why Angola has burst into flames, the decisive failure in humanity. The Portuguese are affectionate, home-loving and hospitable, but they can also be harsh and inhuman. And these flaws in character have left a bitter legacy behind. Nevins's 'A Modern Slavery' shocked an earlier generation by its story of callousness and cruelty. Although liberalism during the early days of the republic softened the harshness, the return of despotism has meant an exaltation of power that has stultified the law by turning every man into the absolute arbiter of his own actions. Beatings with the 'palmatorio', arbitrary imprisonment, the use of informers and agents provocateurs, the arrest of wives as hostages, collective punishments, and above all the contempt—here is the failure in humanity, so explicitly started a few weeks ago by the new Minister of Defence, when bidding farewell to soldiers embarking for Angola: "You are not going to fight against human beings, but against savages and wild beasts."

Assimilation? Can Africans be blamed if they reject it?

The General Assembly of the United Nations has refused to accept Portugal's plea that Angola and other overseas possessions are not "non-self-governing territories" (December 1960). It has now agreed to the appointment of a five-man commission of enquiry into the situation in Angola (April 1961). National pride and fear of the economic consequences to follow any loss of her overseas possessions have inhibited Portugal so far from giving a rational audience to these resolutions. Her moderate men must realise, however, that they cannot insulate their country from the movements and ideologies that are sweeping the world. The Nigerian delegate spoke in statesman-like terms at the April debate in New York when he said: "If Portugal were to take the necessary steps to rectify conditions and if they were to work towards progress and development, I am sure they would have the goodwill of the people of Angola. The African states are not bitter. They are quite prepared to be realistic about matters. They know there are problems to be solved. All we request of Portugal and the United Nations is that certain steps be taken now in order to enable the people of Angola to work towards their self-determination."

(Courtesy: 'Africa South In Exile')

The glory of a workman still more of a master-workman, that he does his work well, ought to be his most precious possession; like the "honour of a soldier," dearer to him than life.

—Carlyle

Knowledge is a comfortable and necessary retreat and shelter for us in an advanced age; and if we do not plant it while young, it will give us no shade when we grow old.

—Lord Chesterfield

The intelligent have a right over the ignorant; namely, the right of instructing them.

—Emerson

There is much satisfaction in work well done; praise is sweet; but there can be no happiness equal to the joy of finding a heart that understands.

—Victor Robinson

Sin is not hurtful because it is forbidden, but it is forbidden because it is hurtful.

—Benjamin Franklin

I have not the qualifications for teaching my philosophy of life. I have barely qualifications for practising the philosophy. I believe, I am but a poor struggling soul yearning to be wholly good, wholly truthful and wholly non-violent in thought, word and deed, but ever failing to reach the ideal which I know to be true.

I admit it is a painful climb, but the pain of it is a positive pleasure for me. Each step upward makes me feel stronger and fit for the next.

I do not believe that 'my philosophy' is an indifferent mixture of Tolstoy and Buddha. I do not know what it is except that it is what I feel to be true. It sustains me. I owe much to Tolstoy and much to Buddha. I still somehow or other fancy that 'my philosophy' represents the true meaning of the teachings of the Gita. I may be totally mistaken. Such a mistake can do no harm either to me or to anybody. For, the source of my inspiration is of no consequence if what I stand for be unadulterated Truth.

Let the philosophy I represent be tested on its own merits.

There is no such thing as 'Gandhism', and I do not want to leave any sect after me. I do not claim to have originated any new principle or doctrine. I have simply tried in my own way to apply the eternal truths to our daily life and problems. There is, therefore, no question of my leaving any code like the Code of Manu. There can be no comparison between that great Lawgiver and me. The opinions I have formed and the conclusions I have arrived at are not final. I may change them tomorrow.

I have nothing new to teach the world. Truth and Non-violence are as old as the hills. All I have done is to try experiments in both on as vast a scale as I could do. In doing so, I have sometimes erred and learnt by my errors. Life and its problems have thus become to me so many experiments in the practice of Truth and non-violence.

By instinct I have been truthful, but not non-violent. As a Jain **muni** once rightly said, I was not so much a votary of Ahimsa as I was of Truth, and I put the latter in the first place and the former in the second. For, as he put it, I was capable of sacrificing non-violence for the sake of Truth. In fact, it was in the course of my pursuit of

Truth that I discovered Non-violence. Our scriptures have declared that there is no **dharma** (law) higher than Truth. But Non-violence, they say, is the highest duty. The word **dharma**, in my opinion, has different connotations as used in the two aphorisms.

Well, all my philosophy, if it may be called by that pretentious name, is contained in what I have said. You will not call it 'Gandhism': there is no **ism** about it. And no elaborate literature or propaganda is needed about it. The scriptures have been quoted against my position, but I have held faster than ever to the position that Truth may not be sacrificed for anything whatsoever. Those who believe in the simple truths I have laid down can propagate them only by living them.

The propagation of Truth and Non-violence can be done less by books than by actually living those principles. Life truly lived is more than books. I do not say that we may not issue books and newspapers. I only say that they are not indispensable. If we are true devotees of Truth and Ahimsa, God will endow us with the requisite intellect to solve problems.

My religion is based on Truth and Non-violence. Truth is my God. Non-violence is the means of realizing Him.

I count no sacrifice too great for the sake of seeing God face to face. The whole of my activity, whether it may be called social, political, humanitarian or ethical, is directed to that end. And as I know that God is found more often in the lowliest of His creatures than in the high and mighty, I am struggling to reach the status of these. I cannot do so without their service. Hence my passion for the service of the suppressed classes. And as I cannot render this service without entering politics, I find myself in them. Thus, I am no master. I am but a struggling, erring, humble servant of India and therethrough of humanity.

I am a humble seeker after Truth. I am impatient to realize myself, to attain **moksha** in this very existence. My national service may be regarded as purely selfish. I have no desire for the perishable kingdom of earth. I am striving for the Kingdom of Heaven which is **moksha**.

To attain my end, it is not necessary for me to seek the shelter of a cave. I

(Continued on page 891)

Population And Progress

By Mr. EUGENE BLACK,
President of The World Bank

During the past hour, the population of the world will have increased by about 5,000 persons, and in the past two minutes alone, by about 170 persons.

This astonishing rate of growth seems to be accelerating. Last year it added about 48,000,000 people to the world's population; this year it is expected to take the total (which 300 years ago was only about 500,000,000) past the 3,000,000,000 mark. In 40 years there will probably be 6,000,000,000 people alive on earth.

This "population explosion" is the result largely of our own progress. Scientific advance has given us healthier, longer and happier lives. But it has also upset the crude balance between high death rates and high birth rates which from time immemorial kept the number of people on earth roughly stable.

People are not having more babies than they used to—in fact, they are mostly having fewer. But whereas perhaps half of all new-born babies once died before their first birthday, and many more did not reach maturity, today infant mortality has been enormously reduced, and at all ages, disease takes a smaller toll. The result is that, over the world as a whole, the number of births now greatly outweighs the number of deaths.

Not First Issue

This is not a new phenomenon. It happened in Europe, and later in America, a hundred and more years ago. But it happened then in countries which had plenty of room and resources to make use of their increased numbers.

Now population growth is concentrated in those countries which can least afford it—in the underdeveloped parts of the world, and most disastrously in the already-crowded lands of Asia and the Middle East, where resources are few and where, at this stage of development, there is all too little room to find a decent living.

This situation has often arisen quite suddenly. In Ceylon, for instance, the death rate was reduced by three-quarters over a single decade, through a public health campaign, costing just 2 dollars a head, directed primarily against malaria.

With living standards still so low, and

with the continuing rapid progress of medical science, there is plenty of room for further advances. Of course we welcome this whatever the problems it may set for us. We all want to reduce the suffering and waste involved in early death and disabling disease. But unless there is a matching fall in birth rates, very rapid population growth is inevitable.

I find this growth alarming—but not perhaps, for the usual reasons. I will not join in the debate as to whether we are headed for a future of "standing room only" on this planet. That threat seems to me pretty remote.

Nor am I too urgently disturbed about the difficulties of feeding the extra persons we expect, or about the depletion of the world's stock of some important minerals—I recognise that these are serious problems, but I put considerable faith in the ingenuity of man and the potentialities of science to find a way out of these difficulties.

Handicap

What does worry me is the appalling handicap that rapid population growth represents for the poorer countries attempting to raise living standards to decent levels. This matters to them, of course, because it threatens their hopes of a better life for themselves and for their dependents.

But it matters to us too—partly because in common humanity we are concerned about their problems, and partly because, I am convinced, there can be no hope of lasting peace in this world while a majority of its people lack the barest necessities for civilised existence.

In countries that are already poor, rapid population growth cripples the drive for economic development because it demands that resources which could be invested to raise the incomes in the future must instead be consumed now, simply to maintain existing standards of living. Most poor societies save so little that the increase in national wealth which these savings earn can be totally swallowed up by population growth.

Worse, if the population is rising, savings are likely actually to fall, because of the extra burden of dependent children. A nation in this position is like a man going

the wrong way on an escalator—it must run even to stay where it is.

Unless these countries receive outside help, they face a stark alternative. They must either reduce their savings, or lower their living standards—although both are inadequate.

The United States and the other industrialized countries have shown their willingness to help; all the evidence, indeed, points to an increasing flow of aid in the coming years. But I find myself increasingly doubtful whether domestic savings and foreign aid together will suffice to allow real progress in crowded countries, if present rates of population growth continue for long.

An example may suggest why. In India, the population of 400,000,000 is growing at the not usual rate of about 2 per cent annually. There is also a tendency to move into the cities. If these trends continue, necessary new urban housing in India is likely to have cost around \$25,000,000,000 over the years 1956-1986—more than the total cost of the Marshal Plan.

To this you must add the cost of roads, sewage systems, water supplies and other services, of hospitals and clinics, of education all of which are already inadequate, and all of which must be greatly improved simply to keep pace with the growing population.

What can be done? There is no subject more sensitive than this, and few in which intervention by governments or other organizations is likely to be less effective. But the population explosion will continue unless people have fewer children, and one must recognize that this is not likely to happen quickly.

It is much simpler to attack disease than to alter the reproductive pattern of a society. Not everyone wants fewer children. And in any case, medicine has yet to make available a cheap and easy way of regulating births.

Not Simple

This being so, it is the more important that we do all we can to help these countries in other ways—and to make sure that the best use is made of the help that is offered. The developing countries themselves must resist the temptation to use aid money for prestige projects; they must in-

vest their capital to earn the highest possible economic returns.

The providers of aid, for their part, have a duty to see that their money is properly and efficiently applied. They must also guard against the very real temptation to offer assistance to serve their own short-term commercial and political objectives, rather than the priority needs of the recipients.

There is the gravest danger that in the face of existing rates of population growth, the help we can offer will fall short of the minimum needs of the poorer countries. We cannot afford to see any part of these resources wasted.

MY PHILOSOPHY OF LIFE

(Continued from page 889)

carry one about me, if I would but know it. A cave-dweller can build castles in the air, whereas a dweller in a palace, like Janaka, has no castles to build. The cave-dweller, who hovers round the world on the wings of thought, has no peace. A Janaka, through living in the midst of 'pomp and circumstance', may have peace that passeth understanding.

For me, the road to salvation lies through incessant toil in the service of my country and therethrough of humanity. I want to identify myself with everything that lives. In the language of the Gita, I want to live at peace with both friend and foe. Though, therefore, a Mussalman or a Christian or a Hindu may despise me and hate me, I want to love him and serve him even as I would love my wife or son though they may hate me. So, my patriotism is for me a stage in my journey to the Land of Eternal Freedom and Peace. Thus, it will be seen that for me there are no politics devoid of religion. They subserve religion. Politics bereft of religion are a death-trap, because they kill the soul. . . .

I am but a seeker after Truth. I claim to have found the way to it. I claim to be making a ceaseless effort to find it. But I admit that I have not yet found it. To find Truth completely is to realize oneself and one's destiny to become perfect. I am painfully conscious of my imperfections, and therein lies all the strength I possess, because it is a rare thing for a man to know his own limitations.

(Courtesy: 'Navjivan Trust')

A National Labour Policy

By SHRI ABID ALI,
Deputy Labour Minister, Government of India

That industrial peace must be maintained while India stands at the threshold of an economic revolution, is recognized by all. This is the obvious goal of our labour policy. It also seeks to do more than merely meeting the problems created by the process of rapid industrialization. A Second Plan has been completed; the Third has just begun. As we develop under our Plans our labour policy and practices acquire a new depth and invest our Plans with a social purpose.

The core of our system of industrial relations is tripartite cooperation. Our labour standards are products of consultations. We have at the national level the Indian Labour Conference, the standing Labour Committee and several Industrial Committees. All major matters of labour policy and administration are discussed there and standards evolved by agreement. The tripartite agreements and legislative and other measures in the labour field represent the consensus of opinion of the parties directly concerned and acquire the strength and character of a national policy operated on a voluntary basis. Even in the matter of implementation we do not rely entirely on the official machinery. We have tripartite implementation bodies both at the Centre and in the States and workers and employers share responsibility for observance of labour standards which they themselves help in evolving.

At the undertaking level day-to-day matters relating to the routine work are regulated by standing orders and both parties have their full say in framing them. We have also provided for a grievance procedure to ensure prompt attention to complaints so that grievances may not pile up to upset the general climate. In most of our sizable undertakings we have Works Committees to promote better relations and it is our intention to make them an active agency for the democratic administration of labour matters within an agreed sphere.

During the Second Plan we introduced on a modest scale, a Scheme of workers' participation in management. The results have been encouraging. A major provision of our Third Plan will be the promotion of this scheme so that it becomes a salient feature of the industrial

relations system. It is proposed to set up joint councils of management in both the public and the private sectors in which conditions favourable to the success of the scheme exist. We believe that workers' participation in management is essential to peaceful evolution of the economic system on a democratic basis. It bridges the gulf between labour and management and promotes an objective approach to common problems.

Code of Discipline

Fresh ground has been broken in the matter of prevention of industrial unrest and settlement of disputes. We have had our legal arrangements for conciliation and adjudication, but the kind of relations required for a fast growing economy cannot be contained within a legal framework. A legal system tends to formalise relations. We have, therefore, given it a new moral dimension by evolving a voluntary Code of Discipline. The Code lays down specific obligations for managements and workers. The Central organisations of employers and workers have all agreed to stand by it. There is no legal sanction behind the Code. The employers' and workers' organisations have evolved and are applying their own sanctions. The basic principle underlying this Code is that the parties should avoid litigation and direct action of any sort and try to resolve differences through mutual consultations or, if necessary, through voluntary arbitration. The encouraging thing about this Code is that it is working and has initiated a change for the better in labour relations. There has been a significant and welcome decline in time loss resulting from industrial disputes.

It is common experience that wage claims are a constant source of friction in industrial relations. The Government has, therefore, assumed responsibility for securing a minimum wage for those sections of workers which are economically weak. The minimum wage is fixed generally on the advice of tripartite bodies. Wage determination in major industries has hitherto been left mostly to the process of conciliation, arbitration and adjudication as the practice of collective bargaining has not fully developed in sectors where workers

are not well organised. More recently, tripartite Wage Boards have been set up with success in a number of major industries. This method would be progressively extended.

Bonus Commission

Determination of bonus payments has been another disturbing factor in industrial relations. It is now proposed to set up a tripartite Bonus Commission so that all policy issues could be considered at the national level and the recurring disputes over bonus claims avoided.

For improving inter-union relationship we have adopted a Code of Conduct. It was accepted by the workers' organisations three years ago. The Code emphasises that every employee should have the freedom to join a union of his choice and the unions should conduct their affairs on a democratic basis. It also seeks to ensure that there shall be no coercion or intimidation in inter-union dealings.

Rivalry between unions makes recognition often a contentious issue. We have drawn up, again on a voluntary basis, a set of criteria for determining a unions-claim to recognition. Under the Code of Discipline, by which the employers and workers have bound themselves, recognition has to be accorded when a union satisfies these criteria and the union which violates the Code of Discipline loses the right to recognition.

This is a brief sketch of the system of labour relations we have developed. It is not my intention to suggest that we have found final answers to our problems. Perhaps no final answers are possible in human affairs. I can only say that our policy has evolved in response to the specific needs of the situation in our country and is suited to the requirements of our planned economy.

We have also taken up several experiments in the difficult field of labour relations. Our success will depend on how workers and management respond to them. We know that enduring changes can come only through a process of education. In the kind of society that we envisage for our country the workers will have to assume greater responsibility in the industrial life of the community. Their abilities have to be developed for taking up this new role. We have, therefore, taken in hand an extensive programme of workers' educa-

tion to sustain our schemes for improving labour relations and bringing about a new order of society.

There is an equal need for training of management. In a developing country, reaching out for a socialist horizon, the management functions will have to take on the character of leadership. They will have to reflect the creative urge of the workers and shape it into the details of practical affairs in industry.

Wide Gap

There exists today a wide gap in social and economic standards between nations, between groups within the same nation, between industrial and agricultural sectors of society and between urban and rural life. The fear is that this gap has a tendency to widen. We must not only resist this trend and control it but do everything in our power to reduce the gap that exists today. The time has come when we should discuss this question of universal importance.

There is no doubt that we must do everything we can to accelerate the pace of economic development but at the same time we must not lose sight of the purpose of economic development which is to achieve social and human progress. Economic development must have a social content and social progress must become the objective and the central theme of planned effort. It is towards this end that our labour policy is directed.

MAXIM GORKY ON BOOKS

Almost every book I read opens a window into a new, strange world, telling me of men, feelings, thoughts and relations I had no knowledge of.

* * *

The more I read, the more the books rendered me akin to the world, the brighter and more attractive life became for me.

* * *

Like wonder-birds of fairy-tales, my books sang to me of how varied and rich life was, of how brave man was in his quest for Good and Beauty.

* * *

Love books, for they make life easier, help you to find your way among the motley tangle of thoughts and feelings, and teach you to respect man and yourself. It fills the mind and heart with love for the world and for man.

The Common Market has become one of the fastest-moving, most prosperous economies on earth—six nations banded together in a unique business partnership

EUROPE'S SIX-WAY SUCCESS STORY

By Mr. OSCAR SCHISGALL

On the elegant Avenue de la Joyeuse Entree in Brussels, tourist guides point out a trim glass-and-concrete building as "the new capital of Europe". This is the headquarters of the European Economic Community (popularly known as the Common Market), centre of a hundred modern miracles that are changing the face of the Continent.

Only 15 years ago the six nations that compose the common Market—France, West Germany, Italy, Belgium, the Netherlands and Luxemburg—lay shattered under the rubble of war. Today, bound together in what has been called "the greatest attempt at European unification since Charlemagne", they constitute the fastest-growing economy in the Free World. They are building themselves a free-trade area nearly as huge (170 million people) as the one that makes America rich, and are already cashing in on the specialization, mass production, and mass marketing that this makes possible. In 1960, commerce among the Common Market countries ran 28 per cent higher than in the year before!

Primarily, this has been accomplished by the most drastic slashing of tariffs in economic history. For generations the 1,700 miles of internal customs lines which separated the six nations had stifled their trade. Tariffs on manufactured imports—precision instruments going into France, for instance—were as high as 66 per cent. Then in 1958 the Common Market began hacking away these trade barriers. By January this year, the six states had reduced all internal tariffs by an impressive 25 to 30 per cent.

Actually, the original plan had been to eliminate internal duties gradually over 12 to 15 years. But the first whacks at the tariff wall spurred business so much that even French industrialists, who had feared competition from modern German factories, voted for faster cuts. It now appears likely that all internal customs lines and restrictive quotas will be slashed to zero by 1966.

That tariff reduction creates prosperity is evident all over Europe. In the first ten months of 1960, for example, France sold a

record Rs. 364 crores worth of goods to Germany, a tremendous increase over the previous year's Rs. 276 crores; in the same period Germany's exports to France totalled Rs. 387-crores, an all-time high.

Meanwhile, firms of the six nations, now open to the icy winds of competition, at home, have become leaner, tougher, better able to compete overseas. One result is that trade outside the Market has also increased phenomenally—by about 20 per cent in the last year.

Nor is tariff-slashing the only accomplishment of the Market. The member countries are committed to equalizing welfare benefits to avoid unfair competition. This means, for example, that German industry may some day have to adopt equal wage treatment for men and women such as France has long enjoyed. Also wages and fringe benefits will be boosted in many companies throughout the six nations. The Market has established a bank of Rs. 475 crores to finance industrial development within the member nations. And a monetary committee is working to bring about, in the distant future, a common European currency.

The phenomenal European boom began before anybody thought of a Common Market. Where cities and factories had been destroyed by war, they had to be rebuilt. This growth was stimulated by numerous steps towards economic integration that were encouraged by post-war American aid. The first was the establishment in 1948 of the 16-member Organization for European Economic Cooperation and its offshoot, the European Payments Union (an international bank and clearing-house). Since then Europeans have produced a proliferation of international associations: Benelux, Council of Europe, etc., all drawing them gradually together and all promoting their prosperity. A turning point was the creation of the European Coal and Steel Community, set up in 1951 by the six present EEC nations to regulate their coal and steel industries and replace cut-throat competition with co-operative growth. In its first four years, steel production went up 36 per cent and

the area became, after the United States, the largest steel producer in the world.

It was thus in a boom atmosphere that diplomats from the six nations met in Italy in 1955. Their purpose was to perpetuate their economic growth by the formation of large economic unions. In 1957 they signed the Treaty of Rome, which set up the EEC beside the older Coal and Steel Community; they also launched a new enterprise, Euratom, to develop peacetime uses of atomic energy. They bound these three divisions together by an executive Council of Ministers, European Parliament and a Court of Justice. The individual governments and their police forces are bound by treaty law to carry out the decisions of the Court; there is no doubt that the entrusting of such powers to an international agency is a long step towards political union.

The president of the Common Market is scholarly, precise Walter Hallstein, a former university professor in Germany. From his Brussels desk, where he supervises a staff of 1,800 economists, diplomats, labour leaders and businessmen, he has witnessed remarkable changes in just three years: first, EEC has accelerated the gradual fusing of two traditional antagonists, France and Germany, in a fruitful business partnership. Second, there has been a virtual abolition of frontiers. The Common Market has created a new Pan-European atmosphere in which many industrial pacts have been encouraged. A new oil pipeline is being built right across the Common Market countries. Telephone companies now base their Continental long-distance rates on distance only, and no longer charge extra for international calls. And, most important, there seems no doubt that the Common Market has given added impetus to the amazing surge that, over-all, has about doubled the national income of these six nations during the '50's.

"To take full advantage of a market of 170 million people", a Belgian banker told me, "industrialists have to think big. Some small firms will collapse in the new Europe-wide competition. But some will grow big." Some are already doing so. A French firm, Desmarais Feres, which sells Azur petrol, is planning to combine with Germany's BV-Aral. Together they will establish the Common Market's first Continental-owned international chain of petrol stations.

Italy's enormous Fiat interests have car-assembly plants in Belgium and Germany, and vast expansion plans will put them in all six nations. And from France several new supermarket chains are preparing to branch out to operate through the six countries.

One effect of the Market has been to drive non-member European nations to form a league of their own. Thus in 1960 Britain, Sweden, Norway, Denmark, Austria, Switzerland and Portugal (called the "Outer Seven", in contrast to the "Inner Six") organized the European Free Trade Association (EFTA), with a buying public of 90 million people. Finland joined EFTA last March. "We have many commodities the Common Market needs", an English businessman told me. "Timber from the northern countries, for instance. And as a united group it enjoys a stronger bargaining position in negotiating reciprocal tariff cuts with the Six."

Having seen how well a union of tariff-free states stimulates business, EFTA has adopted a plan to abolish customs lines among its own members. The schedule calls for tariffs to reach zero in about ten years. Some members hope that it will eventually merge with the Inner Six to produce a Super Common Market of 260 million people.

Britain, with her own reciprocal trade agreements and traditional loyalties to the Commonwealth, has had serious reservations on this point. "I don't think we ought to rush it", said Harold Macmillan. But, as Continental prosperity has soared, there has been mounting pressure on Britain to join EEC.

Chancellor Adenauer says: "I am firmly convinced that, in the not-too-distant future, economic merger of the Inner Six and EFTA will come almost automatically." Meanwhile the essential success of the Common Market has been proved. Perhaps in time it will be the basis for some degree of political union of the separate states of Europe. (Courtesy: 'Investors Chronicle, London')

Man is made for happiness and this happiness is in him the satisfaction of the daily needs of his existence. —Leo Tolstoy

It is the chiefest point of happiness that a man is willing to be what he is.—Erasmus

Export Promotion--The Task Ahead

By SHRI B. R. BHAGAT

Union Deputy Minister For Finance

During the last decade India's exports have been more or less stagnant. In the first Plan, the average annual exports were around Rs. 621 crores, while during the second Plan the average came down to Rs. 611 crores. The first Plan average is higher mainly because of the spurt to exports in 1951-52 as a result of the Korean boom. In terms of volume, exports were higher in the second Plan by about 9 per cent; but on account of less favourable unit values this increase was not reflected in larger export earnings. Economic development within the country increased domestic demand and reduced the surpluses available for exports. Thus, over the decade, while the total world trade doubled, India's share in it declined from over 2 per cent in 1950 to 1.2 per cent in 1960.

New Trends

In the pattern of export trade two main trends can be observed. Exports of agricultural commodities or manufactures based on them (which still account for the bulk of India's exports) such as tea, cotton textiles, jute manufactures, hides and skins, spices and tobacco, on the whole, did not improve. But significant increase was achieved in the export of new manufactures and of minerals like iron ore. But these were not sufficient to offset the decline in the traditional exports.

Our import bill averaged Rs. 724 crores annually in the first Plan. It went up to Rs. 1072 crores—about 50 per cent higher—during the second Plan. The third Plan average is estimated at Rs. 1,276 crores, inclusive of P.L. 480 imports. This presupposes a higher export base and the third Plan rightly prescribes for an average annual export of Rs. 740 crores. It is estimated that by the end of the fourth Plan the level of exports would have to rise up to Rs. 1,300 to Rs. 1,400 crores i.e. more than twice the present level. This is itself one of the essential conditions for ensuring that India's economy become self-reliant and self-sustaining by the fifth Plan. It is also clear that if the exports over the third Plan did not increase significantly beyond the present level, even if the external aid, which has been assumed were forthcoming, there would be quite serious shortfalls in

the Plan. Anything that reduces our targets in the third Plan is bound to jeopardize the march towards the self-sustained growth in the fourth and the fifth Plans.

The Target

It is against this background that the object of achieving export earnings of Rs. 740 crores annually over the third Plan period has been set. This by itself means that the average exports in the third Plan period should be about Rs. 130 crores above the average of the second Plan. It has to be recognized that expansion in exports of this magnitude will not be achieved over a short period. Although we have to proceed speedily, all our efforts should be directed towards expansion of the export base immediately so that we are able to build up the larger export pyramid during the third and fourth Plans.

While most of the actual exporting will have to be done by private business, the role of the Government will be crucial. During the second Plan and more especially since 1958, the Government has taken several measures to step up exports. Some of these measures have not yet had time to produce their full effects. It is evident, however, that existing measures and policies in the field of export promotion need to be strengthened if we are to reach the level of exports envisaged in the third Plan. Some difficult decisions must first be made on general policy involving much more drastic measures than have hitherto been taken.

Cabinet Committee

But this will be fruitless without a really effective machinery which can cut through conflicting departmental interests to translate them into concrete measures, including schemes for each product and to take quick decisions of their day-to-day implementation and interpretation. Potential customers abroad, in a highly competitive world, will not wait for long, while our governmental machinery makes up its mind.

Recently a Cabinet Sub-Committee has been set up to take policy decisions about exports. Under it a committee of Secretaries will sort out the problems of export

promotion. It is expected that these and similar measures will lead to efficiency and dynamism in tackling the technical and administrative problems of export promotion.

If India is to compete in world markets without prohibitive subsidies it is essential to go all-out for maximum economic efficiency and low cost even if this conflicts with other considerations. For instance, it may be desirable to give preference to smaller firms because they employ more labour and less capital; but they may be unable to compete in world markets. Larger enterprises, even if they employ fewer people in relation to the capital employed may, by earning foreign exchange which could be spent on scarce materials, make possible more employment in industry as a whole.

Need of Restraints

It is clear that in order to encourage exports, domestic consumption of exportable goods will have to be restrained while supplies are inadequate to meet both home and export demand. Even where supplies could be increased sufficiently through higher investment, if the products are not essential and the resources could be more usefully employed elsewhere, restraints may be necessary, at least temporarily, on the consumption of such products is vegetable oils, tea, the better grades of coffee, leather and a fairly wide range of manufactures. It needs to be emphasized that this will seldom involve absolute reduction in per capita consumption. The mere slowing down in the rate of growth of consumption will normally suffice. It must be remembered that restraint on consumption will be recouped several times over in terms of production of other goods since the extra export will make possible the import of vital bottle-neck items.

In general the public must be convinced that without such restraints an adequate rate of development will be impossible and that would be a much more serious matter. The scope of restraining home demand may, however, be limited, specially in the case of essential items of mass consumption. It is, thus, essential particularly in these cases that the output of exportable goods is adequately expanded. This means ensuring sufficient investment in the industries concerned together with adequate supplies of raw materials.

Production Costs

Reducing production costs through increased efficiency has to be a major plank of a policy of promoting exports. Even if sufficient supplies are made available for export they cannot be sold unless prices are competitive. But measures to reduce costs will take time to bear fruit. In the meantime, direct or indirect financial assistance may be necessary to facilitate exports. We may have to export some items at prices which are below the average cost of production. Of course, to make the best use of resources, we should concentrate on products requiring a smaller rather than a large subsidy. On this criterion sugar looks a bad bet, at least as a continuing export in the long run unless costs should be substantially reduced either through a geographical redistribution of India's production or in other ways. Put in the shorter run, India cannot clearly afford not to sell the substantial surpluses that have arisen.

With some commodities that do not need a subsidy stable prices are as important as low ones. When prices fluctuate so widely for example, those of jute goods, the buyers abroad will want to switch to substitutes with more stable prices. Measures to reduce fluctuations in such prices are thus necessary.

The selling of vast additional amount of exports especially of the new manufactures is bound to be an expensive business in terms both of rupees and more particularly in terms of foreign exchange. Such expenditure must be regarded as essential investment designed to earn foreign exchange and must not be skimmed any more than investment in say, steel works to save foreign exchange. Expenditure of foreign exchange, both public and private, that can properly be attributed to export promotion probably does not exceed a very few crores. Even a large proportionate increase, say double, though apparently difficult to afford in the present circumstances, would be small in relation to extra exports it might yield.

More Government money will have to be spent on for example, trade fairs and missions. Our trade representations abroad will have to be strengthened and should include experienced men from business. It is of some importance because they will be our main channels for the supply of more detailed and expert market information for

use both by Governments and by business. Our export credit guarantees must be expanded. The terms must be fully competitive with those offered by others abroad and this may require Government assistance to the Export Risks Insurance Corporation. Foreign exchange should be granted liberally to Government agencies and business firms engaged in export trade not only for travel abroad but also for advertising, for building up stocks abroad and for other needs of marketing. Our tax policy should also be geared not only to facilitate cheaper exports through draw backs on customs and excise duties, but also towards a speedier growth of export industries.

New Manufactures

As for our newer manufactures, their contribution, though important, may not be a major one during the third Plan, but it must be during the fourth. As such, they will have to play a vital role in the expansion

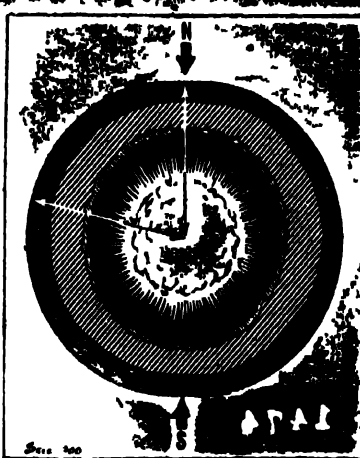
of India's exports. With large reserves of high grade iron ore, India is advantageously placed to produce cheap steel; this comparative cost advantage should be exploited to the full. This will enable Indian industry to compete in the export market over a significant range of products; and the range will widen in coming years. Even where industries are not yet competitive the margin of disadvantage is often not very large. India is thus more favourably placed than a good many underdeveloped countries where the great bulk of manufacturing industries is sometimes still hopelessly uncompetitive. Even where Indian producers are competitive the pull of the sellers' market at home weakens any incentive for export. In countries like the U.K., Germany, Belgium, Sweden or Japan, where a substantial fraction of output is traditionally exported by many manufacturing industries, producers will continue to make

(Continued on page 901)

DID YOU KNOW . .



Experts say the little lamp of the firefly may someday light up the mysteries of life. Life, they say, is possible because plants change sunlight into chemical energy. Fireflies turn chemical energy into light and do it better than any electric company. A light-bulb wastes most of its energy as heat.



The world's deepest mine is the Oregum of the Champion Reef Gold Mine in the Kolar gold field, Mysore State, India. Owing to the oblateness of the earth, polar explorer Robert E. Peary first achieved the distinction (that it is not closest to the earth's centre) on April 6, 1909. Then in 1958 the crew of U. S. submarine Nautilus beat Peary's record by 400 feet.



Some of nature's most taken for granted sources of energy are getting a speculative second look from modern engineers. To bring power to undeveloped regions of the world, science plans greater utilization of winds, tides, natural steam and the sun's rays. Wind energy, for example, has propelled ships, ground grain and pumped water for centuries.

Education Today

By Prof. M. VENKATARANGAIYA

On two features of education as we have it in our country today all are agreed. One is that student indiscipline has grown to enormous proportions, and the other is that there has been a fall in standards at all levels.

Everyone is agitated—and rightly so—over the first issue. The boys and girls who are in schools and colleges at present are to be our future leaders in all walks of life. Nothing can be more depressing than to see them neglecting their legitimate work and indulging in activities which are good neither for themselves nor for the country. The ramifications of student indiscipline are now widespread and have taken various forms. No one has so far been able to suggest a satisfactory solution to the problem. The most alarming aspect of it is that it has ceased to be a matter to be tackled by educationists alone. The number of occasions on which the aid of the police has to be sought is on the increase. This reveals a sorry state of affairs. It is more akin to the problem of juvenile delinquency, so widespread in highly prosperous countries such as the United States.

The fall in educational standards is an equally regrettable feature. Admittedly our standards have never been, on an average, so high as those in the advanced countries of the West. It used to be remarked that the attainments of a university graduate in our country are not higher than those of pupils who leave the secondary schools in England, France and Germany. And it is these standards that are now coming down still further. Public Service Commissions both at the Centre and in the States have drawn attention to this fact in all their annual reports.

In addition to this there is the evidence furnished by the large percentage of failures in public examinations at the secondary as well as the university stages, and in certain cases the figures have been on the increase. There is also a general complaint of widespread corruption and want of integrity among most ranks of public servants. This too reflects sadly on the quality of education in the country, as it is mostly from the educated classes that the service personnel are recruited. A fall in standards is always deplorable. It is all the more so at a time

when, as a nation recently freed from alien rule, we are engaged in the uphill task of reconstructing all aspects of our life—a task whose successful accomplishment depends so much on the mental and moral calibre of the educated classes.

Change of Outlook

We are spending today much more on education than we did in the past. It has also been a source of gratification that people even in the rural areas are keen on sending their children to schools. The old apathy is fast disappearing. Funds have been raised locally to start new educational institutions—secondary as well as collegiate. The number of universities has been on the increase. The expenditure on libraries, laboratories and the like has been going up. More attention is being paid to sports and games, and to recreational activities in general. If, in spite of all this, there is deterioration in student discipline and in the standards of education, it is evident that something is wrong somewhere. What is it that has gone wrong? And whose is the responsibility for it?

One thing is clear. We have not paid as much attention to improving the quality of education as to its expansion. We have multiplied schools, colleges and even universities at too rapid a pace. We have not taken care to see that the institutions started are provided with at least the minimum equipment needed to enable them to discharge their functions with any sense of responsibility.

While it is true that some are better equipped now than in the past, there are many more which do not have any equipment worth the name. Medical colleges are established without making any provision for suitable buildings or hospitals. Engineering colleges do not have the workshops needed. There is no full complement of trained staff. Many non-professional colleges and secondary schools are in the same position. Students waste their time loitering in the verandahs and it is no wonder that discipline suffers and standards go down.

The proverb "half a loaf is better than no bread" has no application to the field of knowledge. Our efforts should have been

directed to the improvement of existing institutions. Instead of this, we have been using most of our available resources to start new ones, without being able to equip them properly. This is at the root of our troubles in the educational field. While our total expenditure on education has been on the increase, the amount spent on each individual student has not shown any such increase, if we keep in view the fluctuations in the purchasing power of money.

A second source of our difficulties in the demoralisation which in recent years has overtaken the men and women who are in charge of education as teachers and as members of managing bodies. The large majority of teachers are unable to meet the bare needs of life with the extremely low salaries they receive. They find it absolutely necessary to supplement their meagre incomes by some work or other outside the classroom. They are, thus, unable to put their heart and soul into their teaching work.

Sense of Mission

It is true, of course, that as teachers they should be guided by the saying, "Man does not live by bread alone," and that irrespective of money returns they should discharge their duties with a sense of mission and with a feeling that they are engaged in the shaping of the abilities and character of the youth of the country—a service than which there can be nothing nobler. The fact, however, is that this sense of mission is totally absent among the large majority of teachers and it is a matter of sorrow that it is absent even among teachers in universities who receive high salaries. It is because of this that teachers have lost their leadership over students—a leadership which ought to be theirs. No improvement in the educational situation will be possible unless and until there is a change in the spirit and outlook of teachers.

If problems of livelihood have marred the work of teachers, problems of power politics have equally marred the work of those on the managing bodies of educational institutions. This is true of private committees, of local bodies such as panchayats and municipal councils, of university syndicates and of departments of Government. Seats on these bodies are valued for the opportunities they give one to patronise and confer favours on individual teachers. Ap-

pointments and promotions are made on the basis not of merit but of communal and party considerations. Nothing brings frustration to an individual so much as the feeling that the value of his work is ignored by the controlling authorities, and it is this frustration that prevails among the large body of teachers today.

Universities have become hotbeds of politics and the same is the case with most of the other educational institutions. There is very little of *esprit de corps* among teachers. They are split up into rival groups. Very many of them have to spend their time in somehow or other getting and retaining the favourable opinion of the more influential members of the managing bodies. In universities where vice-chancellors are elected by senates, it is not uncommon to see these more busy in manoeuvres and counter-manoevres to get themselves re-elected than in administration. From this point of view, it is rather unfortunate that Governments have not accepted the recommendation made by several authoritative bodies that the number of terms of which the same person may be elected vice-chancellor shall be limited to two. The spirit of democratic election is defeated when the same person gets himself re-elected for successive terms.

A third source of our difficulties is the indecision displayed by the Government and other responsible bodies in matters of a crucial character. One such example of this is the medium of instruction in colleges and universities—should it continue to be English or be replaced by Hindi or the regional language?

Nothing is of greater importance to students than the settlement of this issue. Whether they get sound education or not depends on the ease with which they can understand the lectures delivered in the classroom and the text-books and books of reference prescribed for them. With the regional language as the medium of instruction at the secondary stage and with inadequate attention paid to the teaching of English at that level, students proceeding to universities have been finding increasing difficulty in following the teaching through the medium of English. This has been going on for the last so many years. It is a matter of common observation that if standards have come down, it is due in no small degree to the difficulty experienced by uni-

versity students in understanding the text-books written in English.

Some decision should have been taken on this issue long, long ago. But even today the matter is kept in suspense. Only two remedies can be thought of. One is the adoption of the regional language at the university level. This is the more reasonable course in view of its being the medium at the secondary level. The other is to improve the standard of English at the secondary level.

But no decision has so far been taken and the controversy goes on. The result is that a whole generation of the youth of the country are made to go through their course of education through a medium which they are unable to handle with ease. They come out of the universities without real education and with only a few bits of memorised information. In matters like this a decision does not become easier merely with the lapse of time. There are strong arguments both for and against any contemplated course of action. Wisdom lies in making a final decision one way or the other.

Attention may now be drawn to another serious defect with education today. Its purpose continues to be the same as in the days of alien rule. We are aiming, just as the British did, to secure an adequate supply of manpower for the administration of the country. The only difference is that we require at present a larger number of technical personnel to be in charge of the agricultural, industrial and other economic concerns forming part of the Five-Year Plans.

Important Aspect

There are however the wider purposes of education. Throughout the ages it has been regarded as the chief instrument for preserving the cultural legacy of the past and for bringing about desirable changes in it on a well-thought-out basis. It was because of this that our centres of learning were highly valued. Unfortunately, it was this aspect that was totally neglected by the British in India. Even after thirteen years of independence, there is no change in the system of education which we inherited from them. The text-books we use, the history we teach and the curricula we follow remain the same.

It is this gap that we have now to fill. We have to place definite ideals before the youth of the country and shape their con-

duct and character in conformity with these ideals. In accomplishing this, our Constitution will be our best guide. We have incorporated into it the principles of democracy, liberty, equality, fraternity and social justice. We have now to give such ideals reality. And there is no better way of doing this than by giving our education a new orientation.

It is thus clear from the brief survey we have made that education can become a blessing if we pay more attention to improving its quality and bring about a change in the outlook of the teachers and persons in control of it, and if we broaden the ideals which we should try to realise through it.

(Courtesy: 'Illustrated Weekly of India')

EXPORT PROMOTION—THE TASK AHEAD

(Continued from page 898)

efforts and sacrifices in the export market even when the home demand is strong. But in India there is no such tradition of exporting manufactures on a large scale outside the cotton and jute industries. Effective measures to make the home market relatively less attractive will continue to be necessary.

A Challenge

The task is essentially large in magnitude and calls for bold action involving greater sacrifices from the community as a whole. India has reached a stage of economic development where foreign trade as a definite sector of the economy must be recognized as an important dimension of planning primary production and manufacture. The pattern of production must move in step with the requirements of foreign trade; and the structure of India's foreign trade must, in turn, reflect the changes in the economic structure.

The difficulties involved in bringing about this change are no doubt enormous, but they should be accepted as a challenge. It need not give us any cause for despair. In accepting the goal of rapid economic development we have accepted many challenging problems and export promotion is only one of them. We have no doubt that with courage and determination, we will be able to achieve the goal.

FUTURE OF PARLIAMENTARY DEMOCRACY

By Dr. SAMPURNANAND

It would be a sad day not only for India, not only for Asia, but for the whole of civilised humanity, if democracy were to fail in India or, what perhaps would be a better way of putting it, if India were to fail democracy. Countries which achieve their independence from foreign rule and exploitation generally adopt some kind of an authoritarian form of government. Dictatorship is there even if the steel claws are veiled by soft gloves and democracy, if it is allowed to function at all, does so under rigid control. It is, on the whole, easier to canalise all the material and moral resources of the nation towards rehabilitation under a dictatorial regime. Civic rights may disappear for the time being but the loss is believed to be more than compensated by the resulting material prosperity.

India alone adopted a fully democratic constitution at the very beginning of her career as a free nation and she has not so far found it necessary to scrap the Constitution or put it in cold storage. She has so far tried to put planning through without compulsion and is attempting to achieve a socialistic economy without that regimentation of life which others have found necessary. This is a bold experiment whose success or failure has the greatest importance for other countries as well. If we carry on this experiment successfully, through the period of stress and strain through which we are passing, we shall provide the most powerful justification for democracy. Our failure on the other hand will be its strongest condemnation. In so far as a full-fledged democratic constitution is a guarantee for the successful working of democracy, the future is assured.

But a constitution is not everything. It would be a great mistake to ignore or belittle the strength of a number of anti-democratic forces that are raising their head at the moment. They have not so far combined to form an anti-democratic front. Their differences *inter se* are too great to allow them to be so but some of them have great potentialities for mischief and may, in certain circumstances, be able to inflict a serious blow to our infant democracy.

There is, for instance, the Communist Party of India. Throughout its history, it

has been consistently playing an anti-national role. Its inglorious record in 1942 is too fresh in people's memories to need any elaborate description. Even today, in spite of its attempts to take patriotism, it has not been able to muster enough courage to denounce the Chinese as aggressors. It is torn between its loyalties to China and Soviet Russia but, with all this and in spite of the tall verbiage which it introduces into its resolutions, it would be false to itself if it were honestly to believe in democracy. I do not know how many people have seen the interesting brochure "How Parliament Can Play a Revolutionary Part in the Transition to Socialism and the Role of the Popular Masses" by Jan Kozak, Communist member of the Czechoslovakian National Assembly. It throws considerable light on how Communists would like to use the machinery of democracy for their own purposes.

Countries could be "liberated" one after another as Tibet has been and in India the C.P.I. will not scruple, given what it might consider to be a suitable opportunity, to throw all democracy to the winds and replace it by a dictatorship. The term 'dictatorship of the proletariat' has gone out of fashion. We shall have instead a 'dictatorship of the working masses', an euphemism for the Communist Party. The C.P.I. has not yet become an all-India menace up to now but it has already shown its teeth here and there. Unfortunately, democracy is not only slow but at times slow-witted in dealing with this danger. It somehow feels that it is under an obligation to extend democratic privileges to this party, which will take the earliest opportunity to deny them to the people.

Another and, to my mind, a more powerful anti-democratic force is that represented by bodies like the Jana Sangh. It would be a mistake to treat it as a communal body on the same level as the Hindu Mahasabha, the Muslim League or Jamiati-Islami. So far as I am aware, its leaders do not whine and whimper for the unfortunate lot of the Hindus as the Mahasabha does, nor are they particularly interested in establishing a polity in which the Hindu religion shall provide the guiding principles of administration in the manner in which

the Jamaat-i-Islami pins its faith in Islam. They are so far as I can make out protagonists of unbending nationalism and as the Hindus form the majority in the population this nationalism is naturally strongly tinged with Hindu sentiment. But the Sangh is not consciously anti-Muslim. It is prepared to let Muslims live as full citizens, provided no claim is raised on the score of religion or separate culture or separate nationality.

But this aggressive nationalism of the Sangh is irresistibly drifting towards Fascism. Even today its constitution, written or unwritten, is Fascist and its Fascist tendency will probably be intensified in the future. This is a party which makes a powerful appeal to the sentiments of a large section of the population and may well shake democracy to its very foundations in certain circumstances. Everybody will have noticed that the policy which has been adopted with regard to the border question has added considerably to the popularity of the Sangh both among the educated classes and the general masses.

The great mistake made by the national leadership has been its failure to take account of the fact that emotion plays a very important part in a man's life. It has entirely neglected emotions and made no attempt to appeal to them. It has tried to provide no ideal to the people as against the ideals which the Communist Party and the Jana Sangh place before them. Material objectives are desirable things in the long run but they can never provide an incentive to self-sacrifice. They do not raise a man above his petty likes and dislikes. History records no revolution in the name of bread and the things of the flesh of which bread is a symbol. If this continues for long it will simply pave the way for one or another anti-democratic ideology.

There is another danger inherent in our present conditions. There is a welter of political parties. Some of them come before the people with a definite ideology. Others with more or less definite programmes. The result is utter confusion in our life. A nation like ours which has come only lately upon the international stage must be able to husband all its resources and concentrate all efforts on making up for lost time. If political parties are allowed to raise their raucous voices and hamper the nation's efforts to rehabilitate itself so

that it may speak from a position of strength in the councils of nations, if dissipated tendencies like casteism, provincialism and linguism are permitted to flourish and waste the nation's resources there is a possibility that the military may be tempted to try to restore an order which politicians demonstrate themselves as unable to maintain. It is an organised body and, in one country after another it has shown itself capable of taking over and maintaining order as well as accelerating the rate of progress. Such a state of affairs is not unthinkable in India. There is also the unfortunate fact that recently some political factors have unnecessarily crept into military administration. Some echoes of this state of affairs were heard in Parliament not so very long ago. If the military ever does consider it necessary to step in to rectify the chaos apparently created by politicians, we may say good-bye to democracy, at least for a generation or two.

Democracy, it must be clearly realised, is not merely a technique of administration. It is really an attitude of mind—a distinct line of approach to public questions. It is not something entirely new to India. We have been familiar with democratic institutions for centuries. But the policy of the British Government of deliberately breaking up indigenous units of democratic administration has left its mark on the public mind. The Congress, as the body which led the country in the struggle for independence and has been ruling it ever since the achievement of Swaraj, had a great responsibility in this connection. It should have inculcated the democratic spirit not only through its administrative actions and legislative measures but by its own example. There can be no doubt that the Congress Government has succeeded in introducing democratic procedures in many spheres of public life. But unfortunately the Congress has failed to supply the necessary example in its own working. The party has not been equal to its responsibility. Party democracy has not been always in evidence and, on many a critical occasion, interference from those above has not allowed the free functioning of the democratic bodies that constitute the Congress. These things are not unknown to the public and they weaken faith in democracy.

A year ago, a seminar was held in Berlin to discuss some of the problems fac-

ing the new States which are emerging in Asia and Africa. One of the problems to which very great importance was attached was that of reconciling tradition with modernity. To be really independent in an essential matters, a State must absorb the latest in science and technology but it would be suicidal to ignore tradition in the race for modernity. Tradition embodies the wisdom and experience of ages. It is intangible and for that reason all the more powerful. It is possible to cast off the external trappings of the civilisation in which one is born but more difficult to cast off the inborn tendencies, attitudes of mind, the racial inheritance embodied in one's subconscious mind. It may not be wholly bad. The good has to be conserved. The struggle between tradition and modernity is going on in each individual as he reaches a certain stage of intellectual advancement and economic status. Simultaneously it is going on in the whole nation. Unfortunately, it has become something of a fashion to laugh at tradition and equate the old with what is unscientific and superstitious. It forces the protagonists of pure tradition into a defensive position. They may be able in these circumstances to arouse some of the worst passions of the people. This is a grave potential danger to democracy. Wisdom lies not in ridiculing tradition but in tolerant and discriminating adoption of it and in utilising the forces which it can unleash to work in harmony with the forces of modernity for the good of the nation.

It is not my purpose to paint a dark picture. Being myself a believer in democracy, I would be unhappy if its future in India were dark. I wish it to be bright but it would be a mistake to ignore the forces working against it. We can meet them only if we thoroughly understand them. A complacent attitude is the surest way to make certain that democracy shall have no future in this country.

All through this article, I have used the word democracy while the caption speaks of parliamentary democracy. The reason is that, normally, we use the term democracy in the sense of parliamentary democracy alone. There are other spheres of life in which democracy has an important role to play but, for obvious reasons, they do not attract our attention to the same extent at the present moment.

SUGAR MILL MACHINERY INDUSTRY IN INDIA

The sugar mill machinery industry may now be considered to have been successfully established. It has achieved spectacular progress during the last five years and it has now reached a stage where it is now possible to meet the requirements of complete sugar factories for the whole country.

There are at present seven manufacturers of complete plants and 15 other firms who are specialising in manufacture of various equipment for sugar factories against orders.

Six major machinery manufacturers who are fabricating machinery in collaboration with reputed foreign parties have formed themselves into two Consortiums for fabricating and supplying complete sugar factories. Another unit has also been recently licensed in collaboration with a well known U.K. firm for production of mill turbine gears besides other sugar mill machinery.

A Negotiating Committee has been formed for this industry and this Committee has already finalised specifications and the prices for a standard 1000/1200 ton sugar plant. This Committee has been entrusted also with the work of screening applications for new plants as well as expansion schemes.

Two complete plants fabricated by the indigenous machinery manufacturers have gone into operation in March and April this year.

The present-day capacity of this industry can take care of about 12 new standard plants per annum and the equivalent of nine standard plants by way of expansion and replacements.

So far allotment of 12 plants for the season 1960-61 and for the season 1962-63 has been completed. This means the capacity of the machinery manufacturers has been completely covered till the end of 1963.

The annual production of sugar machinery will reach a figure of Rs. 16 crores per year by 1965-66.

Progress Of Cooperative Marketing

Cooperative marketing occupies a pivotal position in the programme of cooperative development. To a farmer, proper marketing of his produce is a matter of crucial importance. Under the prevailing market conditions, he is liable to suffer from a number of malpractices which vitiate the working of the agricultural markets. Cooperative marketing can help to minimise, if not entirely eliminate, such malpractices.

Development of cooperative marketing can also reduce the spread between the price paid by the consumer and the producer. In several commodities, such price spread is quite substantial.

Cooperative marketing, when carried out on an adequate scale, can also make a valuable contribution to the stabilisation of prices. In the integrated scheme of cooperative development that is being carried out in India, cooperative marketing has a particularly crucial role. The effectiveness of cooperative credit can be enhanced by cooperative marketing societies by ensuring a better return for the produce raised by the farmer after taking loans from cooperative sources. Cooperative marketing societies can also facilitate timely return of loans and thereby help in the expansion of the cooperative credit programme.

Marketing societies have also a vital role in regard to supply and distribution of production requisites.

Compared to cooperative credit, however, cooperative marketing is a more recent activity. During the period preceding the commencement of the Second Plan only a few sporadic attempts in this direction had been made. In the First Five Year Plan, the need for development of cooperative marketing side by side with cooperative credit was emphasised, but no specific targets in this regard were laid down. It was only the beginning of the Second Plan that emphasis was laid on the development of cooperative marketing.

The Second Five Year Plan envisaged the establishment of 1800 primary marketing societies and an apex marketing society in each State. Against this target, nearly 1900 marketing societies have been established and affiliated to various apex marketing societies at the State level. In addition, there are special societies dealing with specific commodities, such as sugarcane and cotton.

Significant Increase

During recent years, there has been a significant increase in the turn-over of cooperative marketing societies at various levels. During the cooperative year ending June, 1960, the value of sales handled by primary and central marketing societies—nearly Rs 200 crores—showed an almost 100 per cent increase over the corresponding figure in the preceding cooperative year. Among the principal agricultural crops handled by cooperatives were cotton, sugarcane and foodgrains. These respectively accounted for sales of the order of nearly Rs 17 crores, Rs. 85 crores and Rs. 27 crores.

The progress made in the field of cooperative marketing in recent years has been rather uneven. Six of the States, namely Maharashtra, Uttar Pradesh, Punjab, Gujarat, Madras and Mysore have accounted for over 80 per cent of the sales undertaken by marketing societies of different kinds. Of these States, Uttar Pradesh has made remarkable progress in the cooperative marketing of foodgrains. In the Rabi season of 1960, marketing societies in this State handled over 13 per cent of the total arrivals of foodgrains in the mandies where these societies were located. The performance of some individual marketing societies was much higher. Six of the societies handled over 50 per cent of the total arrivals, while 40 societies handled between 30 to 40 per cent of the total foodgrains sold in the local market.

In regard to marketing and processing of cotton, Gujarat occupies the most prominent position. Over 60 per cent of the cotton handled by the cooperatives throughout the country, in raw or processed form, was accounted for by the cooperatives in Gujarat State.

While cooperative marketing has obtained a foot-hold in regard to marketing of certain cash crops, such as sugarcane and cotton, considerable further development has to take place before marketing societies throughout the country are able to make an impact on the agricultural marketing structure. This requires that, besides carrying out supply and distribution functions in regard to production requisites—a task which is being increasingly taken over by marketing societies throughout the coun-

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Ten Ways To Brighten Your Personality

By MARJORIE BOULTON, M A

Everyone has met and envied some person who is the life of the party, who has plenty of friends, who is given the more interesting tasks, who gains promotion, and whose society is invariably enjoyable

There is no real reason why every human being of normal intelligence and health should not have a bright, attractive personality. But most of us are using only ten or twenty per cent of our real abilities

While there is no cheap or easy way to achieving a bright interesting personality, there are a great many ways in which most of us can become brighter. Here are only ten, out of, perhaps, a hundred

1 Wear Brighter Clothes: Pillai-box red, shocking pink and electric blue certainly do not suit everyone, nor do emphatic checks and stripes. Yet bright, attractive colours do make a good impression, and too much black, brown and dark grey sometimes come off on the personality

Clothes can be gay and smart without being loud. A man can perhaps wear a red carnation, or a bright tie, a woman a bright jewel or lipstick

Ridiculous as it may sound, I know my personality became brighter when I had my ears pierced and took to wearing unusual ear-rings (which I have now collected from many countries)

To ornament ourselves is a form of innocent self-assertion, a positive gesture

It is possible, especially for a woman, to give too much attention to clothes and personal appearance. But there is no doubt that it is pleasanter to look at a well-dressed smart, colourful person than at a diabolical apparition in baggy clothes.

Cheerful clothes at least suggest that there may be a cheerful, affirmative kind of person inside them.

2 Keep Clean: This sounds odd, but a dirty human being is most unattractive. Cleanliness tends to give us self-confidence, since we feel good, know that we look better, and are sure we won't disgust others

Clean teeth that have had any needful dental attention add confidence and ease to our smile. Clean hair looks glossy and attractive.

A woman with a dirty make-up or chipped nail varnish looks far worse than a woman with no make-up or varnish. A man with an unshaved chin looks dirty even when he is not, and is not very kissable!

Clothes should be discarded for washing in good time.

In one sense, these things are not important except as aids to health. But to know that we are presentable adds to self-confidence and so makes us brighter and more sociable

Clean habits imply self-respect and also some care for the comfort of others

3 Improve Speech: An attractive voice is a great social asset, though it is not very easy to obtain, except for the few who have been endowed with natural beauty of voice. It is however, worth while to read a small book on speech training

Many women (myself included) are apt to speak at much too high a pitch if they are at all excited. Yet most of us know that a low voice (low in **pitch**, not in **volume**—if we speak too softly we merely become inaudible, and this does not make for a brighter personality) can be thrillingly attractive.

Many men are apt to mutter and not to move lips and tongue sufficiently

For both men and women, a few lessons from a properly qualified teacher of speech may be an excellent investment.

Anyone who wishes to improve can help himself by listening to a tape-recording of his own voice. We normally hear our own voices through the bones of the head and not as other people hear us. For some reason, the bones of the head seem to flatter is almost invariably shocked when he first hears himself from the tape.

Finally, the stammerer or other person who has an impediment in his speech need not, nowadays, despair. A qualified speech therapist can often give a great deal of help

4 Make Breaks in Routine: Though routine is in many activities a great saver of time and effort, it is easy to dull the personality by becoming too much attached to it.

To walk home from work by a different route, to have a pie for lunch instead of sandwiches, to go to a concert on Tuesday evening instead of to the cinema, to have a sleep from eight to ten and then to go for a walk to look at the stars—these are small variations that tend to make life more of an adventure and to brighten personality.

Life cannot always be happy, but it can generally be interesting.

One statesman once said that when he needed to find a new angle on a problem, he often sought it literally by standing on his head. Not all of us can manage this; but the general principle is a good one.

A change may refresh us and so make us more able to refresh other people.

5. Cultivate Delight in Small Things: One of the most unfortunate of all human habits is the habit of grouching, of looking for something to criticise.

There are, of course, real abuses in society and faults in people that may be corrected when we point them out. But the habit of grumbling creates a depressing, negative and usually unpopular personality.

To look for the good in people is more likely not only to create a brighter personality but to bring out the good in people. This, however, requires a good deal of self-discipline and a rather high level of psychological maturity.

An easier practice is that of looking for small attractive things in life.

Have you ever noticed the extraordinary variety of shades of colour in an ordinary sparrow? The way snow falls? The rainbows made by spilled oil? The delicious smell of a bakery? A bee on an antirrhinum flower? The shadows of fish in sunlit water? Have you woked for the surprisingly numerous trees and plants in the central part of a city?

It is good news that there is cherry jam for tea, or a letter from a favourite aunt, or a sunny day. A deliberate enjoyment of the small things of life helps others, too, to perceive these pleasures, and so makes everyone feel brighter.

6. Learn to Smile: A silly grin is seldom attractive, and a cynical smile is a disgrace to the human countenance. But a fresh, bright, cheerful and friendly smile is a gleam of sunshine for all who see it.

It is not much use practising smiles in the mirror; smiles really come from inside. The way to learn to smile is to learn to like. Above all, we should realise that smiles are gifts to other people, not a sign of some weakness or sentimentality.

I was once asked in school, in a severe and suspicious tone, "What are you smiling at?" and then rebuked for smiling. As a matter of fact, I was smiling at an irony in a book that the teacher himself had not perceived.

We should be careful how we warn people not to smile. The unpleasant person is the one who wears the scowl.

7. Cultivate Appreciation, Administration and Gratitude: To learn to praise people for their good points, to thank them heartily for kindnesses, to express admiration (both to their faces and behind their backs) of work well done, of talents, of good qualities, or creditable actions, makes us seem brighter and more attractive. The habit also tends to encourage others to behave well and to have confidence in themselves.

Praise is a great tool of love.

In a Swedish home, a child may rise from the table as soon as the meal is eaten. But it is customary for a child or a guest to say to the housewife, "Thank you for the meal." The child also says this to the father, who earned the money to provide the meal.

Do we thank wives and mothers often enough for service in the home, or bread-winners for winning the bread, or children for helping or for good behaviour?

Do we appreciate what other people do to oblige us?

If we want to see sunshine in people's faces, we must let them know that they are appreciated. That sunshine in the face is reflected back to make us brighter.

8. Cultivate Warm Humour: Laughter is wonderful medicine: a tonic, a pain-reliever, and a stimulant all rolled into one.

A joke made about our own misfortune takes some of the sting out of it. A story told against oneself may be a great success. Something comical that will not hurt anyone's feelings should be passed on to others. People who try to make us laugh are generally popular.

On the other hand, there are unworthy forms of laughter. The tease is engaged in a form of unpleasant bullying. The spiteful joke is always unpleasant. And to laugh at the misfortunes of others—however ludicrous they may look—is not a very civilised way of behaving.

For example, if someone falls down, the first thing to do is to see if they are hurt or need help. If they laugh, it is safe to join in the laughter. But if they are too much hurt or embarrassed to laugh, laughter from others gives an impression of callousness.

A good practical joke, to my mind, is one that cannot possibly upset anyone. It is warm-hearted and essentially kind. For example, one day a woman who collected glass mice found in her room, a mass meeting of chocolate mice, many of whom were carrying paper banners with slogans. This was a present as well as a joke.

But the person who on the first of April fetched a busy doctor out of bed to attend an imaginary patient ought to have been kicked.

Ragging and practical jokes that make extra work for other people, hurt the feelings of others, take mean revenges or damage other people's possessions are not signs of a bright personality. They indicate immaturity, selfishness and sometimes downright callousness.

A very good exercise for brightening personality is to think of ingenious jokes that will harm no-one.

Cynical humour is also to be avoided. It shows pessimistic and negative attitudes. Humour should be life-affirming, cheerful, positive and appreciative.

9 Fresh Air: Fresh air and some outdoor activity tends to brighten personality, largely because it improves health. Stuffy rooms tend to make us dull and sleepy. A walk in the fresh air often makes us brisk and bright once more.

10 Fresh Air for the Mind: If we wish to acquire a brighter personality, the windows of the mind are even more important than the windows of the house.

Ideas, experiences, personal contacts, make us bright. Mental stuffiness makes us dull and often censorious.

* Intelligent reading, discussion, varied hobbies, travel, change of occupation, the

cultivation of numerous and assorted friends, are among the things that brighten personality.

One of the best things I ever did in my life to brighten my own personality was to learn Esperanto. The international language soon brought me into contact with an amazing variety of human beings from many countries and of very different backgrounds. It also made possible much more interesting travel than I could have had as an ordinary tourist of limited means.

Any study, hobby or interest which brings us into contact with other people and new experiences will tend to give us brighter personalities.

It is a mistake to keep always to the same newspaper, the same social circle, the same amusements. To try something new is to add to oneself. To hear another person's point of view is to learn something—even if it is only how better to defend our own point of view. To talk with someone whose background is quite different from our own is to learn something more of life.

I have mentioned ten ways of brightening personality. There are many more. The most important of all them is to **want** to have a bright personality to **wish** to be friendly, to **desire** to make others happy.

(Courtesy: 'The Psychologist Magazine')

PROGRESS OF COOPERATIVE MARKETING

(Continued from page 905)

try—the cooperatives must pay greater attention to the sale of agricultural produce. This is not easy, because marketing cooperatives have to work against a strong vested interest—"cultivators pitted against traders, trying to pit them at their own gain and oust them from the market which the traders already hold."

Third Five Year Plan

It is in this context that the Third Five Year Plan, while envisaging the establishment of 600 new marketing societies, primarily aims at strengthening the existing marketing societies, linking them effectively with village societies, and enlarging their marketing operations. In regard to cash crops also, marketing cooperatives will be increasingly encouraged to undertake processing activities as an adjunct to their marketing operations.

Electricity From Tidal Power

By LUCIEN NERET

The construction of the world's first tide-driven electric power plant, begun at the end of last year, will be completed in the spring of 1966 at the mouth of the Rance River, near St. Malo, in France. It will take six years to close the estuary of this river in Brittany with a dike 2,600 feet (800 meters) long. Then twenty-four turbo-generator sets will go into service. Each of these sets, composed of a generator driven by a turbine in the form of a ship's propeller, will be housed in a submerged water-tight shell. Driven by water flowing at a rate of 635,000 cubic feet per second, this "battery" of turbo-generators will feed 240,000 kilowatts of current into the French power grid, both for industry and domestic purposes. (The kilowatt is a unit of electric power corresponding to 1.36 horsepower. As an example, a light bulb can consume 100 watts, or one-tenth of a kilowatt.)

The dreams of the pioneers of tidal power have become reality after twenty years of research and experimentation. The Rance 'tidal trap', capable of forcing the sea to lend us a few crumbs of its colossal power, will supply an average of 544 million kilowatt-hours per year. The decisive element in this victory of science has been a strange, pot-bellied machine weighing eighty-nine tons, with a four-bladed propeller at one end. It resembles a huge airplane engine.

Duel Against the Sea

The world's first tidal engine was immersed in the English Channel in November, 1959. For six months, it ran day and night. Then it was hauled out of the sea and the experts looked it over carefully. Their first verdict: the sea had lost its duel against the machine—it had not attacked any metal part. An engineer told me: "We used steel with a 17 per cent chromium content; it did very well; the bronze was perfect." The engine had stood up perfectly to the test of sea-water corrosion, that fearful enemy which can sink the greatest of ships.

This alternating-current generator capable of putting the fantastic "breathing" of the ocean to work is a triumph of engineering. Before this engine was developed, the use of tidal energy seemed a Utopia. At best, it was a gadget capable of running a little mill for a few hours a day. But then in 1919, an American engineer, L. F. Harza,

had the idea of fitting a turbine and a generator into the same crankcase and submerging the unit in a current of water.

The device worked but, since it was not completely water-tight, short circuits soon wrecked the electrical system. Fifteen years later, Arno Fischer, a German, went to work on the delicate problem of sealing the joints. He succeeded. In fact, his engine worked so well that it overheated dangerously. Then a Frenchman, J. Guimbal, had a flash of inspiration: he used oil, both to improve the insulation of the electrical circuits and to cool the moving parts of the machine.

The efforts of these three men, who never worked together, gave birth to the "bulb", the ideal tidal engine. It functions and produces electricity no matter which way the tide is running. The disadvantage of time lost during long periods of high tide which had been the engineers' nightmare, is eliminated. Since these "bulb" sets will be linked to hydro-electric or atomic plants, they will receive current during the night and function as pumps. In this way, during the off-peak hours of power consumption, the tidal plant will operate as a gigantic pumping station to fill a reservoir. During the day, when homes and factories begin to draw power, the tidal plant will have a huge supply of water "in stock" and will be able to feed its kilowatts into the power grid.

Once the "bulb" had successfully taken its tests, architects and builders entered the picture. They are now piling up stones and concrete to close the estuary of the Rance River with a 2,600 ft. long dam between Brebis Point and Briantais Point, with an intermediate support on Chalibert Island. If all goes according to plan, even more daring undertakings will become possible. For example, the huge neighbouring bay of Mont St. Michel could be closed off. Then the sea would provide from ten to fifteen million kilowatts per second—that is, fifty to sixty times more than the Rance tidal power plant.

Still, this isn't very much in comparison to the 36,000 million kilowatt-hours which the ocean wastes every day in the tides. This lost energy corresponds approximately to all the power used by the earth's popula-

(Continued on page 911)

DOES LIFE EXIST IN SPACE?

By TOVE NEVILLE

Life forms found in "rocks" falling to earth from the skies may tell if there is life elsewhere in space. Does life create itself, and is this happening all the time?

Organic materials and pre-life forms found in meteorites may give a clue to life in space and also reveal how life and the solar system began.

This exciting quest for the knowledge of life as it evolved in the universe has already begun here on earth and will be continued as astronauts break the earth barrier and explore space.

Organic matter that makes up all life as known on earth has been found by scientists several times in stony meteorites (meteors that fall to earth).

Now Dr. Frederick D. Sisler, a microbiologist of the U.S. Geological Survey, has succeeded in growing bacteria-like cells taken from the Murray meteorite that fell from space in 1950.

In order to make as certain as possible that the meteorite was not "contaminated" by earth bacteria from the ground or atmosphere after it fell, Dr. Sisler sterilized it in a solution of hydrogen peroxide and bichloride of mercury and under ultraviolet light.

He then broke a piece of meteorite open and pulverized small amounts of the inside with sterile mortar and pestle in a germ-free laboratory. Part of the pulverized material, he inserted in test tubes containing a solution of seawater, peptones and sugar. The cells in this solution grew and reproduced themselves in several generations as only living things do.

However, Dr. Sisler said that bacteria can seep into the inside of the meteorite with water from the outside.

Such bacteria inside a rock would stay in an inactive stage, and it might be this kind of cells he has found, Dr. Sisler said. Nevertheless, it is quite possible these particles are from a space source.

To be quite certain living particles found in meteorites actually came from space, satellites could be sent out into space to "catch" a meteor before it became contaminated by the earth's atmosphere. If a satellite could capture a meteor at about 50 miles altitude (bacteria have been known to exist at 20 to 30 miles) and bring it back

to earth in a germ-free condition, it could be examined under a sterile conditions on earth and the mystery cleared up, Dr. Sisler suggested.

He also said another way of getting "uncontaminated" meteorites would be to gather them in Antarctica where great falls of meteorites were reported by Admiral Byrd in the 1920's. Bacteria on such meteorites would be inactive—in a state of suspended animation—since they cannot live in Antarctic temperatures.

The meteorites used by Dr. Sisler is a carbonaceous chondrite belonging to a small group of meteorites containing free carbon and sulphur, calcium and magnesium sulfates, and small amounts of organic matter.

Dr. Sisler first examined the Murray meteorite in 1959 with an infra-red spectrophotometer (for analysing the compositions of materials). He became interested in further study when he found in it several organic radicals that occur in living materials, such as amine, nitroso, nitrile and some hydrocarbon.

His findings were checked by Dr. Melvin Calvin of California University, both by infrared spectrophotometer and a gas chromatograph (for analysing the composition of gases). Dr. Calvin stated that the molecules found in the meteorite are believed by scientists to be part of the chain of evolution of chemical forms from inert to living materials.

Atoms such as carbon and hydrogen are believed to have been caused to react to form complex molecules by the energy of cosmic rays, ultra-violet light and electrical storms.

Dr. Calvin said it has been known since the turn of the century that hydrocarbon compounds of the petroleum type exist in stony meteorites. He also said it is reasonable to suppose the compounds inside a meteorite stayed unchanged by the heat generated on the outside of the meteorite as it entered the earth's atmosphere.

A fragment of another stony meteorite that fell at Orguell, near Toulouse, France, in 1864, has also recently been examined by scientists and found to contain chemical compounds, including hydrocarbons, akin to those only found in living things on earth.

Also believed to be of space origin but not yet found to contain life are tektites, a form of glass. Recently a scientist found a 500,000-year-old tektite from the Philippines contained the same amounts of nickel and iron as found in a meteorite. The tektite containing the tiny meteorites is believed to have formed when a meteor hit the moon and sent out a spray of liquid particles that cooled tektites result from comets or meteors hitting the earth.

Many scientists believe that the process of the creation of life could have taken place on millions of planets travelling around suns (stars) other than our own and that perhaps life is being created all the time. One astronomer has estimated that the known universe may contain as many as 100,000,000 earth-like planets.

Stars with planets located at such a distance that temperature are not too hot or too cold might be just as capable of supporting life as is the earth. Other necessary factors for the existence of life are thought to be water and a suitable atmosphere.

The three planets in the solar system believed capable of supporting life are Venus, earth and Mars. However, since no evidence has been found of oxygen on either Venus or Mars, chances are very slim that higher life forms are present there.

Venus, about which very little is known because it is always shrouded in clouds, has been the subject of many conflicting theories. However, although atmosphere of Venus contains water, its surface temperature is believed to be about 600 degrees Fahrenheit, virtually ruling out any form of life.

The possibility for life on Mars is somewhat better, but only for the lowest forms such as mosses and lichens. Observations of the infra-red light reflected from Mars indicate that hydrocarbon-like materials exist there.

Colour changes on the planet's surface suggest the possibility of some form of life.

The first experiment to find out if contact could be made with any possible outside intelligent beings was the Project Ozma, named for the queen of the far-away land of Oz in the fairy tale. Radio astronomers led by Dr. Frank Drake listened to radio signals from deep space, hoping to hear definite patterns that would indicate a system of intelligent communication. The 85-foot radio Astronomy Obser-

vatory, Green Bank, W. Va., was used, but no signals sounding like any kind of a code pattern were heard.

In the past, scientists have reported hearing systematic-sounding radio noise. Marconi said signals he heard sound like Morse code. Nikola Tesla reported in 1916 that he had heard signals suggesting "number and order" but was discouraged from publishing any data by public ridicule.

Dr. Drake said the Army has war records taken of radio noises from space in the 1920's. The study of these records may yield new information about the possibility of life in space.

ELECTRICITY FROM TIDAL POWER

(Continued from page 909)

tion in twenty-four hours—whether electrical, mechanical or animal power. Harnessing the sea is, therefore, a very, tempting prospect. France was the first country to take on this delicate job. The Americans are planning to follow suit by reviving the old plan to construct a tidal power plant in Passamaquoddy Bay on the Canadian border. As for the Russians, they have chosen Mezun Bay in the White Sea as the site of an experimental plant linked to the sea.

Last year, a power congress held in Madrid gave considerable attention to the problem. And the big United Nations Conference on new sources of energy, which met in Rome this August, also studied the use of tidal power.

Astronomists, however, warn us there may be a few pitfalls on the road to electricity from the sea. Tides are of astronomical origin because they are the result of the influence of the sun and the moon upon our planet. That tidal energy which we are going to transform into electricity must be taken from somewhere. It is taken from the kinetic energy of the earth's rotation. The more tidal power plants we build, the more we shall slow up the earth's rotational speed.

This 'braking' will not be very serious although, if we harness the equivalent of 1,000 million kilowatts of power, we will end up by losing about ten hours over 2,000 years. We have lost just about this much since the birth of Christ—and we don't have the consolation of being able to tell ourselves that we generated electricity during that time. The energy was simply frittered away in the breakers.

Teachings of

ANANTHA



GANDHI

Q. What do you mean by the 'non-violent State' as conceived by Gandhiji? Write a short note on it.

Ans. Gandhiji's social ideal is the classless and Stateless society, a State of self-regulated enlightened "anarchy", in which social cohesion will be maintained by internal and non-coercive external sanctions. But as this ideal is not realizable, he has an attainable middle ideal also—the predominantly non-violent State. Retaining the State in this second best society is a concession to human imperfection. Gandhiji distrusts the State because it is steeped in violence. He believes that for the State to be democratic, citizens must acquire the capacity to resist non-violently and misuse of authority. The non-violent State will not be an end in itself but one of the means for the achievement of the greatest good of all. It will not be a sovereign State but a service State. The State will be a federation of decentralized democratic rural satyagrahi communities. These communities will be based on "voluntary simplicity, poverty and slowness," i.e., on a consciously slowed tempo of life in which emphasis will be on self-expression through the larger rhythms of life rather than quicker beats of the quest of power and pelf.

The non-violent State will perform limited functions using the minimum of coercion. Society in the non-violent State will be characterized by social and approximate economic equality. The economic life will be based on agriculture and cottage industries, though there will be a minimum of centralized production. The centralized production will be organized either on the basis of private enterprise, both labour and capital acting as mutual trustees and trustees of consumers, or failing this, on the basis of State ownership and joint management by the State and the representatives of workers. An important feature of the economic life of the non-violent State will be the more or less complete self-sufficiency of small regions.

The non-violent State will be a genuine

democracy because it will be based on the largest possible measure of liberty and of equality of consideration. It will minimize exploitation and replace the master-servant and the capitalist-labour relationships by a new co-operative order based on rural culture. Equality of political rights will have a reality it lacks today, for it will be accompanied by decentralization and social and approximate economic equality. Functions will be related to capacities and the emphasis will be on service. Thus society will be simple enough to be within the grasp of the average man and yet rich in opportunity for a conscious life of freedom and individuality, service and constructive criticism.

Whether people will try to set up a non-violent State depends on whether they really desire liberty, peace and progress, i.e., genuine democracy. The establishment of peace and the fulfilment of democracy are synonymous with the cultivation of non-violence. Non-violence alone can reconcile national existence with international cooperation, even as it alone can harmonize individual liberty and social life.

Thus Gandhiji's political theory is an organic part of his philosophy of life. The isolation of politics from moral principles in the name of science or realism is, to him, a trap to kill the soul. The method of non-violent resistance is a great contribution of his to the philosophy and technique of revolution. With greater thoroughness than any other thinker in the history of political thought he has explained how non-violence and democracy are integral parts of each other and how each can operate successfully only along with the other. His conception of democracy, in which every individual has acquired the capacity to resist non-violently misuse of authority, in which the dissent of the minority get the maximum consideration and which is characterized by "the magnanimity of the majority", is in advance of the Western conception of democracy.

VOCABULARY TEST

(We all suffer from lazy vocabularies; to get out of our comfortable word ruts requires constant effort. In this challenging test, tick the word or phrase you believe is nearest in meaning to key word. Correct answers are also given below.)

1. **confluence**—A: junction of streams. B: power. C: persuasion. D: harmony.
2. **pliant**—A: applicable. B: tractable. C: persistent. D: industrious.
3. **garner**—A: to decorate. B: cut down. C: gather. D: scatter.
4. **nostrum**—A: longing. B: sadness. C: despair. D: anything savouring of quackery.
5. **mandate**—A: fruit of a palm. B: aquatic animal. C: command. D: herb.
6. **anodyne**—A: forgetfulness. B: electrical term. C: weakness. D: anything that soothes.
7. **splenetic**—A: irritable. B: witty. C: shining. D: vivacious.
8. **cynosure**—A: cure all. B: centre of attraction. C: easy job. D: violent criticism.
9. **porcine**—A: resembling a hog. B: smooth. C: hard. D: full of holes.
10. **impinge**—A: to bounce. B: puncture. C: point at. D: encroach.
11. **collate**—A: to clash. B: add up. C: put together. D: disperse.
12. **insular**—A: proud. B: narrow-minded. C: arrogant. D: strange.
13. **tatterdemalion**—A: riotous. B: strewn about. C: naked. D: ragged.
14. **lectern**—A: reading stand. B: lamp. C: throne. D: one of a minor order of clergy.
15. **raffish**—A: sportive. B: tawdry. C: humorous. D: smart and stylish.
16. **littoral**—A: booty. B: writing style. C: shore and adjacent land. D: trash.
17. **oracular**—A: eloquent. B: pertaining to a person of unquestioned wisdom. C: purposely deceptive. D: pertaining to hearing.
18. **obviate**—A: to make unnecessary. B: make clear. C: confuse. D: oppose.
19. **macabre**—A: homely. B: strange. C: envious. D: gruesome.
20. **Thespian**—A: tramp. B: one who lisps. C: actor. D: gypsy.

ANSWERS

1. **confluence**—A: junction of two or

more streams; as, "The city stands at the **confluence** of two rivers".

2. **pliant**—B: Tractable; easily yielding to influence; as, a **pliant** nature.

3. **garner**—C: To gather or gain; collect; as, to **garner** honours.

4. **nostrum**—D: A quack medicine, and so, a scheme savouring of quackery; as, a political **nostrum**.

5. **mandate**—C: An authoritative command, order or decree; directive bidding; as, a **mandate** from the voters.

6. **anodyne**—D: Anything that relieves pain or soothes the mind; as, the **anodyne** of sleep.

7. **splenetic**—A: Irritable; peevish, spiteful; as, a **splenetic** disposition.

8. **cynosure**—B: Centre of attraction or attention; as, the **cynosure** of all eyes.

9. **porcine**—A: Resembling a hog; as, a **porcine** figure.

10. **impinge**—D: To encroach or infringe; as, to **impinge** on one's liberty.

11. **collate**—C: To put or bring together as writings or facts; to compare critically.

12. **insular**—B: Narrow-minded; narrow; illiberal; as, **insular** prejudices.

13. **tatterdemalion**—D: Ragged; of people in rags and tatters; as, a **tatterdemalion** crowd.

14. **lectern**—A: A reading stand or reading desk, as in some churches.

15. **raffish**—B: Tawdry; frowzy; disreputable; as, a **raffish** character.

16. **littoral**—C: A shore and adjacent land; coastal region.

17. **oracular**—B: Pertaining to a person of unquestioned wisdom or to something regarded as of infallible authority; prophetic; as, an **oracular** pronouncement.

18. **obviate**—A: To make unnecessary clear away; as, to **obviate** objections.

19. **macabre**—D: Gruesome; ghastly frightening; as, a macabre scene of destruction.

20. **Thespian**—C: An actor or actress.

QUESTION BOX

In these columns we answer the queries from our readers. It may not be possible to answer each and every question but a considered reply is given to selected questions. Personal queries should not be asked. Letters from our readers are welcome. These should be addressed to the Editor Question Box.

Q. Kindly enlighten me about the Bizerta crisis. Also please let me know why France is reluctant to give up Bizerta while it has given up all her bases in Tunisia? (B. P. Bhattacharya, Hooghly)

Ans. An agreement on the evacuation of the French forces in Tunisia was concluded on June 17, 1958. It provided that the 7,000 troops stationed outside Bizerta would be withdrawn within the next four months, i.e., till October 1958, and that negotiations for a provisional agreement on the status of Bizerta base, over which Tunisian sovereignty would be recognized, should begin not later than October 1, 1958. The Tunisian Government undertook to remove all restrictions on the movements of the French troops.

The evacuation of the French troops under the above agreement began on July 3, 1958 and was completed on October 11, 1958 with the evacuation of the air base at El-Aouina, near Tunis. But the French forces did not evacuate the Bizerta base.

France is reluctant to restore Bizerta to Tunisia for it is an important air and naval base and from here they can easily fight the Algerians and its retention in the hands of France is essential for NATO. Another factor weighing with France is the dread of a French naval mutiny in the event of evacuation. Bizerta, with its under-ground bomb-proof arsenal, is a strongpoint in the French defence system.

Since then Tunisia has been accusing France for using Bizerta as a base for espionage and for smuggling capital out of the country. The situation thus became intolerable for the Tunisians who could never feel that their independence was complete so long as a foreign military base remained on that soil.

Bizerta was again in the news recently when Tunisia demanded the evacuation of

the French troops. During the last three months many fightings broke out between the two forces in which many people lost their lives, a majority of them being Tunisians.

The matter was referred to the Security Council and its call for an immediate cease-fire in Tunisia has been heeded by both France and Tunisia. Their next step, if they want a peaceful settlement of the issue ought to be to respect the Council's insistence on the withdrawal of all armed forces to positions occupied before the outbreak of the Bizerta conflict. But the Security Council adjourned 'sine die' on July 29 without having adopted any of the resolutions laid before it.

This impasse in the Security Council necessitated a special session of the U.N. General Assembly to hear the Tunisian appeal. The Council's resolution calling for a ceasefire in Bizerta and withdrawal of troops to conform to the status quo had left untouched the basic issue of the future of the naval base. The United States and Britain have been fighting shy of the demand that the U.N. should call upon France to enter into negotiations for evacuation of the base. Their attitude is in contrast to the offer of their good offices to bring about a settlement after the French bombing of Sakiet in 1958. The reluctance to antagonize General de Gaulle with the Berlin crisis looming is obvious. France has refused to participate in the Assembly debate, maintaining that it prefers direct negotiations with Tunisia.

The U.N. Secretary-General came for an on-the-spot inquiry and went back with the impression that France was by no means in a hurry to give effect to the Security Council's resolution and that she was still holding to positions from which she should have already withdrawn. The French Government's utter contempt for

eratic Republic. It is occupied by the forces of the U.S., the U.K., France and the U.S.S.R., each having its own sector of occupation since 1945 according to the decision of the Potsdam conference. The three areas occupied by France, the U.K., and the U.S.A. are called the Western Sector, and the area occupied by the U.S.S.R. is called the Eastern Sector. The position of the Western Sector made it easy for the U.S.S.R. to cause difficulties for the Western powers when international relations were bad, as it has always been dependent for its supplies on the main road through Eastern Germany to Western Germany. After the failure of the Foreign Ministers' Conference in Moscow, the declaration of the Truman Doctrine and the announcement of the Marshall Plan, all of which events took place in 1947, the Russian authorities introduced new traffic regulations in March 1948 which threatened to force the Western powers to abandon the Western Sector. The Berlin airlift, however, by which supplies were flown into Berlin by day and night for several months, defeated this manoeuvre.

For a while after the failure of this attempt to blockade Berlin, Soviet pressure against the Western powers declined. But in 1951, the attempt to force a western withdrawal began again. An extortionate tax was imposed on the users of the Berlin. In 1952, travel restrictions were imposed on both Allied Personnel and West Germans. The campaign has been steadily intensified since the signing of a treaty between the Soviet Government and East Germany's Communist Government on September 20, 1955.

Khrushchev announced in November 1958 that East Berlin would be transferred to East Germany on 27th May, 1959, and the Western forces would have to withdraw from West Berlin by that date, or Berlin should become a free demilitarized city guaranteed by the U.N. But the Western German Senate declared on November 29, 1958 that the Soviet unilateral proposal was unacceptable. "It has the obvious aim of absorbing all Berlin eventually into East Germany", said the city's governing body.

Recently Nikita Khrushchev again proposed a free-city-status for West Berlin and told them to clear out of Berlin by the end of the year; but the Western powers again rejected this proposal saying that "the offer

of a Free City of West Berlin actually amounts to a demand that the Three Western Powers give up their absolute right for a doubtful leasehold."

Renewing his stand on Berlin problem Mr. Khrushchev threatened the Western Powers that Russia will sign a separate peace treaty with German Democratic Republic (East Germany) if the Western Powers do not accede to this proposal and that the west will forfeit the right of access to West Berlin, in case they do not agree to the proposal. The separate peace treaty with East Germany and the recent closure of the sector border by the East Berlin authorities accentuate the atmosphere of cold war in Europe.

Khrushchev seemed as determined to eliminate West Berlin as the West is to defend it, for, it has given sanctuary to millions of refugees and has been a symbol of hope to millions of others behind the iron curtain. For these three reasons, and for its deep commitment to West Berlin, the West cannot give up the city.

In the midst of such situations obtaining in the world, particularly the differences in the Four World Powers, a solution of the Berlin Problem is simply a far cry and it is now feared that this problem might kindle the flames of the Third World War.

STUDENTS' EMPORIUM

(Continued from page 929)

Forest Services are generally filled by promotion on merit-cum-seniority basis. Qualified serving personnel may also apply when senior posts are advertised by Forest institutions and Union Ministry of Food and Agriculture. It may, however, be mentioned here that prospects for better employment outside the State Forest Departments are very limited.

FOR FURTHER INFORMATION contacts may be made with:—

1. The chief Conservator of Forests of your State;
2. The Northern Forest Rangers College, Forest Research Institute and College, Dehra Dun;
3. The Southern Forest Rangers College, Coimbatore; and
4. The Employment Exchange serving your area.

(Courtesy: 'Union Ministry of L.&E.')

STUDENTS EMPORIUM

HOW TO MAKE A GOOD IMPRESSION ON OTHER PEOPLE

At a party or an interview, socially or in business, the ability to make a good impression upon others is sometimes the deciding factor between success and failure, acceptance or rejection.

If you can make a good impression you may win promotion with all that that may mean in terms of security and the good things of life. You may gain some coveted position or distinction in your community. You may win the hand in marriage of the person you adore.

There are six factors which go towards determining the impression we make upon others:

1. Appearance: Aim at appearing well-groomed. See that your clothes are well-brushed and pressed, and fit well.

Your hair should be clean, trimmed in style which experience has taught you becomes you best, and well-brushed. Hair lotions should be used sparingly.

Shoes should be polished and linen spotless. Beware of overdressing; few people respect a dandy, and employers are not anxious to engage them. Err on the side of convention in the choice of your clothes, particularly in the business world.

If your appearance at an interview be slovenly, the prospective employer is justified in inferring that you will be slovenly after engagement, not only in your dress but in your work.

It is worthwhile, if we want to make a good impression on others, to spend a little extra on clothes and upon their maintenance in good condition.

2. Voice and Speech: If your voice is not only clearly audible, but attractive in its vitality, variety and tone, people will be favourably disposed towards you.

If it is a harsh croak or a throaty whisper, if your speech is indistinct or monotonous, if your words are clipped or weakly formed, if your phrases are slurred or al-

lowed to peter out, then you do yourself a dis-service.

Rightly or wrongly, people tend to assess us—our intelligence, ability and education—largely by the quality of our voice and speech.

Anyone of average intelligence may improve his voice and speech beyond recognition provided he is determined, is patient, and works on the right lines.

Ten minutes a day spent reading poems aloud with due feeling and expression, will do much to make the voice attractive.

While varying your pace according to the needs of the poem, on the whole you will need to speak more slowly than in normal conversation. Think of the meaning of the key words as you say them. Stress them, linger over them, bringing out their full meaning and beauty of sound.

But words are not only beautiful. They can be clean-cut like diamonds and as coldly efficient as an electronic brain.

Therefore, on alternate days, concentrate upon clean and perfect speech. Read slowly and deliberately. Over-emphasise initial and final consonants. Aim at pure vowel-sounds.

3. Manner: Manner is difficult to define. It includes demeanour and deportment. Mental attitude as well as physical. If we would create a good impression, its constituent qualities must be courtesy, tactfulness, deference and humility:

If you monopolise the conversation, or speak like a snob or a braggart; if you are conceited or thoughtless or uncouth—you will not make a good impression. Good manners and politeness will speak much in your favour.

An acceptable manner is not a guise that can be donned as we travel to an interview, or worn for a special occasion. If we try to do that we shall deceive few.

It comes as a result of years of training—self-imposed or otherwise. To a large extent it depends upon our general attitude to people, upon our philosophy of life.

If, basically, we are tolerant, thoughtful, sympathetic and understanding, our manner will be different from that manifested if we are intolerant, conceited, brash, and ignorant.

4. Confidence: This is another essential if we would create a good impression. Naturally, its possession or otherwise greatly determines our manner.

It is very desirable to appear confident, but very dangerous to appear over-confident. A knife-edge may separate the two. Over-confidence may easily prejudice our chances, make us unpopular, and lead us into embarrassing situations as when an over-confident person takes a post that is far beyond even his dormant possibilities.

Although a wise interviewer will allow for some signs of nervousness, he will sooner or later wish to see signs of an innate self-confidence.

Here are some practical tips as to how you may build up this very valuable quality.

Remember that those you wish to impress are creatures of flesh and blood like yourself. They have their limitations. They, too, are probably nervous when interviewed.

Remember that any feeling of inadequacy and inferiority is attributable to unpleasant experiences in childhood. But you are no longer a child and need feel like this no more.

Realize that you are unique and of value as a person. That although others may be more able or more wealthy, you have your own contribution to make to life.

Practise auto-suggestion. As you fall asleep each night repeat the jingle:

Hour by hour, day by day,

I grow in confidence every way.

Imagine yourself acting and speaking confidently and with composure.

5. Interest: To create a good impression we must show an active interest either in the person we wish to impress or in the organization he represents.

It is well worthwhile, specially when preparing for an interview, to go to some trouble to gather information either about the person we are going to meet or the firm he represents.

If it is a prominent person, consult

"Who's Who." If a clergyman, refer to Crockford's Directory. If it is a representative of a firm, try to discover something of the history of the firm, in development and present activities.

If you can't find out before, ask the appropriate questions at the interview. Active interest is evidence of an alert mind and cannot fail to impress others to your advantage.

6. Enthusiasm: People who live enthusiastically possess a mystic quality which most others find attractive. Such people are human dynamos alert, active, enterprising—always excited about some new venture or endeavour.

Obviously they are picturesque, powerful personalities, potential leaders, with vital, inquiring minds. Whatever they do, they undertake with zest and eagerness. They cannot fail to create a good impression either in the social or business worlds.

The could't-care-less attitude is seldom attractive, and at an interview it is fatal. Yet many aspirants for a post fail to evince any real enthusiasm for it.

This is unimaginative. Naturally every would-be employer wants value for the hundreds or thousands of pounds he is going to expend on a new employee, and one evidence that he will be satisfied is the presence of enthusiasm.

If you are enthusiastic about getting a post, by all means show it. Do not stifle that important and attractive quality under blankets of reserve and self-consciousness.

Give attention to these six factors, and in all circumstances, you will make the good impression you so much desire.

(By Robert J. Lumsden in the *Psychologist Magazine*),

* * *

WHY WE BELIEVE IN CLASSICS

Classics are literary works that have attained the highest standards of quality. They are generally old works which are thus classified. This is because recent works have not had time to pass the test—not that inspiration is no longer the source of the lifebreath of modern authors.

Once a departed friend of mine and myself were going over the ruins of a very famous old temple. We were on the terrace, when I said to my friend that our ancients knew how to make such remark-

ably good cement as what we saw in that ruin and commented that it seemed skill of that kind had deteriorated these days. My friend came of an engineering family. He laughed at my observation and told me that old mortar was good because it was old, and that properly mixed modern mortar, too, would set and become as strong as the mortar in the old ruins, if we lived to see it after a century or two. The composition gets harder and harder as time passes, he explained, and so we admire very old buildings. Bad quality constructions disappear and do not come to view at all.

Something like this happens to literary works also. Writings of no value or of poor quality disappeared, specially under the conditions that prevailed in the old days, when keeping books was difficult. Some writings have great immediate vogue, but soon find their level and disappear. But as the centuries pass, the best writings survive and show their great quality. **These are classics.**

The lives of people are shaped by such writings. Ideas of right and wrong are greatly shaped by what great writers and poets have written and sung. Our very measuring standards of literary merit are formed on the basis of such writings. So the classics become set as classics, as old mortar sets and shows marble-like hardness. Quality survives and the survival itself enhances its quality. My friend's exposition of good lime-mortar holds good for classic writings also. If Valmiki, Vyasa, Tulsidas, Kalidasa, Kamban, Shakespeare, Milton and the authorised version of the **English Bible** are classics, it is not only because they are of the highest quality but also because we have built our own minds, so to speak, out of those classics. There is nothing so good to nourish life as the material that has gone to build that life.

I therefore believe in classics. Not that we do not want new writings. But new writings are new writings and classics are a class apart. They sit guard over new writings, vigilantly watching quality. Classics give us perpetual intellectual pleasure re-uniting us with the great souls of the past; when we read them, they occupy us to the exclusion of the present times, and give us serenity; they elevate our souls. They guard us against vanity, and all other evils. That is why the Sikhs **worship the Book**; why the Muslims revere

the **Koran**. So also the Hindus do homage to the **Ramayana** on Saraswati Pooja Day and the Christians treat the family **Bible** as a precious inheritance. They are all the unbroken voice of God, the eternal Watchman and Friend. (By 'C. Rajagopalachari')

* * *

COMMON TERMS OF LANGUAGES

Being amidst Army personnel I had an ardent wish to collect some common terms of all languages. They were war days and we could not think of such activity as we had the responsibility for the rapid spread of literacy among soldiers in 21-day courses according to a war-time education scheme.

The words commonly spoken differ from the classical terms. So a special pursuit is essential to trace the similarity of words in spoken languages. The great efforts of eminent scholars reveal this similarity. For example, in Shopian, in the Kashmir Valley, the traders' term for hundred is *nur*. In a few South Indian languages this term is *nuru*.

When we come to the classical terms of languages we find them basically the same. Many Sanskritized terms of all languages form the Hindi equivalents. Such Sanskritized terms associate all languages. I will compare some terms with Telugu to get the same sounds of other languages.

The Assamese terms like *abhilasha* (wish), *aradhana* (adoration) and *jivan shakti* (vitality) are the same in Telugu. We find a large number of such terms in Punjabi such as *sada* (always) and *lobhi* (greedy), *autar* (incarnation), *des* (country) and *har* (necklace). The terms in Telugu end in *mu* in the above last three terms.

In Bengali and Telugu, the classical terms generally make no difference at all. The examples are *adivasi* (aborigines), *karta* (performer), *ichchha* (wish), *puja* (worship) and *kalpana shakti* (power of imagination). Marathi and Telugu terms have the same sounds like *vyapar* (trade), *ghor* (horrible), *chatur* (clever), *hatha* (obstinacy) and *gad gad ta* (rumbling sound). The Telugu terms end in *mu*. Similar are the terms in Oriya and Telugu, namely, *adhika* (excessive), *anyaya* (injustice), *aparadha* (guilt) and *dhyana* (imagination).

We see no change in many Gujerati and Telugu terms like *kavya shakti* (poetic genius) and *apada* (calamity).

All the Sanskritized terms of Malayalam, Telugu, Tamil and Kannada are the same. In Malayalam the examples are *asthanam* (assembly), *vivaham* (marriage), *Mahima* (greatness), *pramanam* (authority), *nirnayam* (decision) and *upadravam* (calamity). The Tamil terms are *Kailasam* (the abode of Lord Shiva), *sanatanam* (ancient), *mandukam* (frog) and *desantaram* (foreign land).

In all the above examples only one letter 'u' is added to the terms in Telugu at the end. In Kannada *bala* (strength) and *samudra* (sea) become *balamu* and *samudramu* in Telugu. In Kannada the term *dodda* (big) is an equivalent of *pedda* in Telugu. The great poet Bammmera uses *dodda* in the context of Sri Krishna lifting the *Giri Govardhana*. Thus there is an intermixture of terms in each language as in Hindi and Urdu with an admixture of words.

We can trace the start of similar sounds in some international terms. *Mausam* is an Arabic term. *Masamu* (month) is a Telugu term. In the following Hindi and English terms we notice the similarity of sounds:

amrit--*arabrosia*; *behtar*--*better*, *basan*--*basin*; *chhit*--*chitz* (fast printed cloth); *kaph*--*cough*; *ladav*--*load*; *lab*--*lip*; *nam*--*name*; *sabun*--*soap*; and *tufan*--*typhoon*.

Linguists can unravel the secret of sounds of the world's languages. For example, India can be traced to the Aryan term *syand* (flowing), *Sindh*, then *Ind* and then *Indus*; *Punjab* (*Panchab*) applicable to the five tributaries of the river *Indus*: *Multan* (*Mulasthan*) and *Thanesar* (*Sthaneswar*). For reason each language is a source of knowledge by which we deepen our vision, enrich our culture and enlarge the horizon of reason, imagination, intellect and thought.

Languages are the musical and spiritual links of our lives. The songs composed by Thyagaraj fill our minds with blissful feelings. His songs with ragas 'Hamsadhvani' and 'Sankarabharanam' touching the Western tunes are best liked by some Western musicians. Students from all parts of the world desirous of learning languages from one another strengthen the bonds of brotherhood and kinship with the whole world. Like the form of human limbs, like the colour of human blood, there is oneness of truth in all languages. Let us learn

this eternal truth with one harmonious voice of the universe.

(By 'Y. Audinarayan Raju')

* * *

THE SECRET OF RELAXATION

We all agree that "a change is as good as a rest," but only a few of us care to emulate the famous French Cardinal, Richelieu, who used to relax from the high cares of state by jumping up with his servant to see who could reach the highest point of a wall.

When De Gramont, a French courtier of that time, came upon the scene, he was so amused that he joined in the jumping, too. Being a true courtier, he allowed the Cardinal to win, and by this exercise of diplomacy became Richelieu's favourite.

Jumping, in fact, seems to have appealed to many clever men of old. Samuel Clarke, the great 18th-century theologian, copied Richelieu's habit by jumping over tables and chairs. He called it "jumping for joy."

Perhaps their example has helped to inspire one of the famous statesmen of modern times. David Ben-Gurion, Prime Minister of Israel, stands on his head every morning in order to assist the flow of blood to his 71-year-old heart and brain. British viewers are familiar with 67-year-old Sir Paul Dukes, the practising yoga expert who recommends standing on the head as a means of avoiding fatigue.

Spinoza, one of the greatest philosophers of all time, never sat back when he was weary. When his brain was tired and therefore not capable of the highest type of work, he engaged in the game of setting spiders to fight with each other.

This gave him immense amusement, and he used to roar with laughter at their antics, and then return to his work clear-minded and full of energy.

The idea of spider fights may not appeal to us. What is important is to choose for our resting periods something that interests us, and is, at the same time, a complete break from our usual daily activity.

Men who are old are supposed to be too tired to begin new work. The verdict of history is otherwise. Even the ancients knew that age was no real bar to the taking up of a new course of study.

Socrates learnt to play on musical instruments in his extreme old age, and Cato began study of Greek at the age of 80.

Accorso, a great mediaeval lawyer, when he was asked why he began the study of the law so late in life, explained that "as he indeed began it late, he should therefore master it the sooner." Coming nearer to our own age, Dr. Samuel Johnson began to learn the Dutch language only a few years before his death.

What could be done by these great men can be done by these who lay no claim to extraordinary mental powers. It is not a question of excelling in the new subject at a late age, but of relaxing completely by a change of mental activity. There is no known limit to what the brain can achieve.

Those whose jobs are sedentary, or who engage in any form of intellectual work can relax more completely through some form of physical activity, or, failing this, an identification with a form of physical activity.

Sport either engaged in personally, or if advancing years forbids this, watched as a spectator, is an excellent form of true relaxation.

We may find jumping a little too energetic for us but whatever form of activity we choose, so long as it is a complete jump from our usual occupation, and so long as it interests us, we shall find it to be relaxation in the true sense of the word. In short, activity, not sitting back in idleness, is the best way to recreate energy.

To sit back and do nothing may seem to a tired man or woman an ideal way of resting, but in fact we do not sit back and do nothing. Our minds are active and all sorts of worries come drifting in.

We are—or are supposed to be—sitting at ease, and therefore is nothing that we can do to cope with these worries except to get more and more worked up. Far better to get up and "jump for joy" even if we only picture ourselves doing it.

(By 'Ronald Adkins')

* * *

GUIDE TO CAREERS: THE FOREST RANGER

For preservation, development and maintenance of forest-wealth in India, which yields an annual revenue of twenty crores of rupees, every State Government

has a State Forest Department. In the Second Five Year Plan a provision of twenty-two crores of rupees was made for development of forests. The programme includes, besides maintenance of the existing forests, covering new areas with forest, increased production of timber, conservation of wild-life and increased facilities for the development of forest researches.

For the purpose of efficient administration, forest areas are generally divided into circles, divisions, ranges, beats and rounds. Conservators, Deputy Conservators, Assistant Conservators and Forest Officers who hold gazetted posts in State Forest Services, are in charge of circles and divisions. Under these Officers there are a number of trained forest officials known as Forest Rangers in charge of Forest Ranges.

A Ranger is the executive head of the Range and as such the backbone of the Forest Department. His work in a State Forest Department is on the one hand to assist the Forest Officer in forest administration and on the other hand to guide and supervise the work of foresters and forest guards. He is the seniormost non-gazetted forest official in the department, and, as such, responsible partly for supervisory work and partly for routine work in his area, which may be either a range or a part of a range or a number of ranges depending on the size of the range, transport facilities etc. His area, however, is divided again into a number of beats and rounds. For efficient management of work in his jurisdiction, a Ranger is required to be constantly on tour in the forest area. Though sometimes a jeep or a horse or a mule or a bicycle may be available, quite often he has to tour the forests on foot. While on tour he sees to it that the exploitation of the forest resources and their renewal, naturally or artificially by planting, is done scientifically, and that forests, nurseries, depots etc. are looked after properly. He ensures that weeding, thinning, pruning, cleaning etc. are done for the healthy growth of the forest crop. Construction and maintenance of roads, bridges and buildings in the forest is also done under the direct supervision and guidance of a Ranger, who is equipped with the fundamentals of this aspect of engineering.

A Ranger must be always alert to prevent any forest fire, and in case it occurs he

must handle the situation boldly and effectively. In the event of any accident he may be required to apply first-aid to injured persons.

In his office the Ranger prepares reports, maintains accounts, stock registers of equipment, live and dead stock of materials like transport vehicles, agricultural implements, tents, building materials, timber etc. He has to handle general correspondence work also. He helps in the enforcement of forest laws. When he finds any person violating forest laws, he is authorised to chargesheet him and produce him before a Forest Officer for trial. When the offender is found guilty and has agreed to pay a fine levied the Ranger is responsible to realise the fine. In case the accused person fails to pay up the amounts so levied he takes steps to prosecute him in a court of law. Occasionally a Ranger may be posted at the State Forest Headquarters to do mostly paper work dealing with correspondence, reports, statistics, etc.

PERSONAL QUALITIES required are sound health, ability to do strenuous and hazardous work, courage, self-reliance, tact and intelligence. He is required to be constantly on tour in forest areas. Hasty marches are not allowed unless in emergencies. In some places he may have to go inside a jungle in a boat or on an elephant. He must be able to climb trees and hills. He should be able to handle guns and rifles. He is required to win the confidence of villagers living in nearby villages and for that purpose he should be tactful, resourceful and honest. Above all he should be prepared to live in remote rural places where some of the amenities of modern cities are not available. He should be prepared to live in tents in the forest at all seasons of the year and at all hours of the day. For him, practically there are no fixed hours of work. It will be to his advantage if he enjoys the charm of out-door life.

TO QUALIFY a Ranger must successfully complete a two-year Ranger's course either from the Northern Forest Rangers College, Dehra Dun or Southern Forest Rangers College, Coimbatore. Two categories of India students are admitted in these colleges—(1) directly recruited probationers sponsored by the State Governments and (2) subordinate forest staff already in Government Services. For admission in these colleges candidates belonging to the first

category must have passed the Intermediate examination or its equivalent or pre-University or pre-professional course of any recognised University after Higher Secondary School course with two or more of the following subjects viz., Mathematics, Physics, Chemistry, Botany and Zoology. He should be between 18 and 24 years of age, and must possess sound health with 5 ft. 4 inches height and 31 inches chest with expansion to 33 inches. The upper age limit may be relaxed in the case of Scheduled Caste and Scheduled Tribe candidates by three years. They should also be able to walk over 16 miles in 4 hours. For candidates belonging to the second category, a serving subordinate forest official must have either 5 years of forest service at his credit or he must have stood first at State Forest Training School. He should be at least a Matriculate and be below 30 years of age. All these candidates, however, should secure at least 40 per cent marks in a qualifying examination in English dictation, essay writing, mathematics and general knowledge. Physique, personality, general bearing and interest in out-door life are also considered very important while making selection for admission into the course.

Syllabi of the Ranger's Course in the Forest Rangers Colleges include principal subjects like Silviculture, Forest Management, Soil Conservation, Botany, Forest Entomology and Pathology, Surveying and Drawing, Forest Engineering, Forest utilization etc., and accessory subjects like Physiography, Elementary Geology, Forest Law, Wild Life Management, Accounts, etc. In addition to the study of these theoretical subjects, trainees are required to do practical work in selected forest areas in various parts of the country. The cost of training is nearly Rs. 7,000. The entire cost is borne by the State Governments who nominate them. The trainees are also given a monthly stipend of about Rs. 75/-.

OPENINGS exist mainly in State Forest Departments though a few Rangers are also employed in Forest institutions and in the Ministry of Food and Agriculture.

PROSPECTS FOR ADVANCEMENT for efficient and well-qualified Rangers are to gazetted posts of Forest Officers like Assistant Conservators of Forests, Divisional Forest Officer or similar other posts. Certain percentages of vacancies in Superior
(Continued on page 923)

EDUCATIONAL FORUM

NEW COLLEGE OF ENGINEERING IN DELHI

The College of Engineering and Technology, which formally opened in New Delhi on August 17, is one of the major Indian training establishments being assisted by British aid under the Technical Co-operation Scheme of the Colombo Plan.

The United Kingdom Government is to provide 10 or more professors and two workshop supervisors for a period of five years.

Equipment is being provided to the extent of £250,000, supply being organized by co-operation between the Federation of British Industries and four professional institutions in the United Kingdom (the Institutions, respectively, of Civil, Mechanical, Electrical, and Chemical Engineers). The Government of India is providing the bulk of the teaching staff, items of equipment locally available, and the funds for the building of the college.

The foundation-stone of the college was laid on January 27, 1959 by H.R.H. The Duke of Edinburgh during his visit to India.

The Government of India in 1953 decided to establish at Delhi a College of Engineering and Technology to provide training and research at the highest level. The college is affiliated to the University of Delhi.

The college will offer five-year courses in civil, mechanical, electrical, and chemical engineering and in textile technology. In the first stage of development, the undergraduate population will be 1,250 students' all resident at the College, which occupies a site of 230 acres at Hauz Khas. Post-graduate courses for 300 students will begin in 1964. These will provide facilities for research for the further training of engineers at higher levels of study, and also refresher courses for industry.

In 1958, the then president of the Federation of British Industries called a meeting of representative industrialists and members of engineering institutions and industrial associations at which it was decided to raise a fund for the provision of

equipment through a trust managed by a committee under the chairmanship of Sir Eric Coates. This committee is advised by a technical sub-committee under the chairmanship of Sir Willis Jakeson, director of research and education of Associated Electrical Industries (Manchester) Ltd., who has been appointed to the Chair of Electrical Engineering at the Imperial College of Science and Technology, London. More than 100 firms in Britain have made contributions to the extent of over £250,000.

Professor M.S. Thacker, Secretary to the Indian Ministry of Scientific Research and Cultural Affairs, is the chairman of the governing body, on which Indian industry is represented. Mr. R.N. Dogra, principal of the college, was formerly principal of the Punjab College of Engineering and Director of Technical Education in Punjab.

SCHOLARSHIPS FOR TEACHERS' CHILDREN

Dr. K.L. Shrimali, Union Minister of Education, stated in the Rajya Sabha on August 17 that as a measure of recognition of the important services rendered by the working Primary and Secondary School teachers, including teachers employed in the institutions for the handicapped, the Government of India had included in the Third Five Year Plan a scheme for the award of 500 Merit Scholarships every year during the Plan period to enable meritorious children of such teachers to pursue university education.

Only those who passed the School Leaving, and Pre-University examinations in First Class in the year in which awards were made, would be eligible to compete.

Dr. Shrimali said that the scholarship once awarded would be tenable from the commencement of the Post-Matriculation stage till the Post-Graduate stage, subject to first class performance during the period of study.

The rate of payment for Intermediate/Graduate/Post Graduate, Research of Professional Courses was Rs. 50, Rs. 75 and Rs. 100 p.m. respectively. A Means test was also prescribed and only those the in-

come of whose parents did not exceed Rs. 500 p.m. would be eligible for the full award.

* * *

WORLD CONFEDERATION OF TEACHERS' ORGANISATIONS

Addressing an international gathering of representatives of the teaching profession in New Delhi on August 1, 1961, Shri Nehru said that in spite of training in science and the humanities, the world had arrived at a stage where people and nations were hostile to each other. The Prime Minister was inaugurating the tenth Assembly of the World Confederation of Organisations of the Teaching Profession. He said it was only through education that the peoples' minds could be influenced and directed towards thinking in terms of peace, cooperation and understanding. Any kind of approach to problems coloured by fear and hatred was a bad approach. Referring to the theme before the conference "Education for Responsibility", the Prime Minister said, education should produce a person who could run himself properly. The basic problem was to introduce into education an element of human wisdom.

The Assembly was attended by representatives of more than a hundred national organisations of teachers in about 70 countries. There were also observers from the specialised agencies of the United Nations.

Speaking before the Assembly, Dr. K. L. Shrimali, Minister for Education, appealed to teachers to give leadership to the democratic forces in the world today which were struggling for the freedom of common man. A new age with emphasis on the group was emerging and choice had to be made between dictatorship and democratic planning.

* * *

IMPETUS TO WOMEN'S EDUCATION

Dr. K. L. Shrimali, Union Minister of Education, affirmed in the Rajya Sabha on August 23 that Government had taken steps to give extra impetus to women's education by giving special grants.

The Minister said that the total amount provided for the expansion of girls' education in the Third Five Year Plans of State Governments was about Rs. 175 crores which included Rs. 11 crores for the special programme. The rates of grant-in-aid to State Schemes had not yet been decided.

However, in conformity with the general approach adopted in the Third Plan for allocating the spheres of responsibilities as between the Government of India and the States, the special programme has been included in the State Sector and the States/ Union Territories have provided about Rs. 11 crores in their Third Plan. It has been made quite clear in the Third Five Year Plan that encouragement of girls' education is by far the most important objective in the field of education and further that the programme for extending education to all children in the age-group 6-11 was of such crucial importance that financial considerations as such should not be allowed to come in the way of its successful execution in any State.

* * *

NEW UNIVERSITIES IN THIRD PLAN

So far the University Grants Commission has agreed in principle to the proposals of the State Governments of the Punjab and Madhya Pradesh to set up the Punjabi University and a University at Raipur, respectively, during the Third Plan period.

A proposal of the Government of Madras to set up a University at Maduria was accepted in principle by the University Grants Commission in October, 1960. Later, the State Government dropped the scheme.

* * *

TRAINING OF ENGINEERS IN DEFENCE ESTABLISHMENTS

The scheme recently launched by the Defence Ministry and the Scientific Research and Cultural Affairs Ministry to train engineers in Defence establishments is growing into a popular movement.

In Delhi the two tutorial classes running at the Defence Science Laboratory, Metcalfe House, and the Defence Pavilion in the Exhibition grounds have already on their rolls 380 students. These prospective engineers are employed in various technical establishments and workshops in and round Delhi and they receive their theoretical training at the two centres.

After a 3½-year course they will graduate from the Institution of Engineers (India), a qualification recognized by the UPSC.

This kind of training was being given formerly by private academies. This is

therefore the first organized effort on a governmental level to provide good coaching at a nominal fee for part-time students so that those already in technical jobs can get training as engineers. The fee is Rs. 200 for the whole session. At the moment the course is limited to theoretical training, but soon the students will be shown the machines and other equipment with which they have to work.

Dr. R.S. Verma, Director of the Defence Science Laboratory, Delhi, and officer-in-charge of the training at the Delhi centre, told reporters that nearly 4,000 engineers would be trained under the scheme in the next three years.

The course has already started in 12 defence establishments, in Dehra Dun, Kanpur, Jodhpur, Cossipore (Calcutta), Secunderabad, Bangalore, Cochin, Jabalpur, Bombay, Kirkee and Ahmednagar, and 2,000 prospective engineers are receiving training there to meet the country's growing demand for technicians.

At a conservative estimate, the country will need during the third Plan period 30,000 technically qualified personnel over and above those to be turned out by the colleges. There is also a shortage of engineer officers in the Defence Services and technical graduates in required number are not forthcoming to meet the defence needs.

U.P.S.C. EXAMS IN HINDI

Candidates competing for selection by the Union Public Service Commission will be able to take their examination in Hindi or in English with effect from 1963.

The U.P.S.C. has conveyed its decision to the Union Government and steps to enforce the scheme will be taken at an early date.

Candidates invited by the U.P.S.C. may take the written tests and interview in Hindi or in English.

This important decision in regard to the recruitment of personnel to the Union Government services is considered the first phase of the programme of enforcing Hindi as the official language while retaining English as an associate language for official purposes.

It is understood that the decision was taken after prolonged discussions among various authorities concerned.

According to reliable reports, the University Grants Commission was opposed to the move as the Commission thought that the option of taking examinations in Hindi might prove disadvantageous to the candidates from the non-Hindi-speaking areas of the country.

The Ministry of Education and other authorities, however, did not share this view.

KANPUR TECHNOLOGICAL INSTITUTE

A Consortium of nine leading universities and institutions of the U.S.A. including the Massachusetts Institute of Technology has been formed to assist in the establishment of the Indian Institute of Technology at Kanpur.

For the present, a sum of 3.38 million (Rs. 1.61 crore) has been granted.

The Kanpur Institute has started functioning in temporary accommodation in 1960 and steps have been taken to undertake the construction work on the permanent site.

ADMISSION INTO ENGINEERING COLLEGES

Replying to a question as to the procedure adopted for admission into all the regional engineering colleges, Prof. Humayun Kabir, Minister of Scientific Research and Cultural Affairs, said in the Lok Sabha on August 22 that the admissions to all the regional colleges excepting the Durgapur and Jamshedpur Colleges were made on the basis of marks secured by the candidates in their qualifying examinations. For the Durgapur and Jamshedpur Colleges, admission tests were held.

For the Allahabad, Nagpur and Jamshedpur Colleges, the admission qualification was Intermediate in Science (Physics, Chemistry and Mathematics) or equivalent. For the rest it was Higher Secondary Certificate.

To fill the hour, and leave no crevice for a repentance on an approval—that is happiness.

—Ralph Waldo Emerson

That silence is one of the great arts of conversation is allowed by Cicero himself, who says, there is not only an art, but even an eloquence in it.

—Hannah More

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C & C.)

CORRECT USE OF NATIONAL FLAG

The Union Home Ministry has after consultations with other Ministries' and State Governments, framed a 'flag code' to ensure the correct use of the national flag.

The code prescribes that wherever the flag is flown, it should occupy the position of honour and distinction.

When flown on public buildings, the flag should be displayed on all days, including Sundays and holidays, from sunrise to sunset, irrespective of weather conditions.

It may be flown on such buildings at night also but this should be only on very special occasions. The flag should always be hoisted briskly, and lowered slowly and ceremoniously.

When bugles are sounded, the hoisting and the lowering of the flag should be done simultaneously with the bugle calls.

The saffron side should be at the farther end of the staff when the flag is displayed from a staff projecting horizontally or at an angle from a windsill or a balcony or the front of a building.

When it is displayed in a manner otherwise than by being flown from a staff, the saffron band must be uppermost if it is displayed flat and horizontal on a wall; if displayed vertically, the saffron should be to the right.

The flag should be suspended vertically with the saffron side to the north or to the east, as the case may be, when displayed over the middle of a street running east-west or north-south. If displayed on a speaker's platform, the flag should be on the speaker's right. If otherwise displayed, it should be above and behind the speaker.

When used on occasions like the unveiling of a statue, the flag should be displayed distinctly and separately. The flag should not be used as a cover for the statue or a monument.

When the flag is displayed on a motor car, it should be flown from the staff which should be firmly affixed to the car in the

front. When it is carried in a procession, it should be either in the hands of the first man on the right side of the first line of marchers, or, if there is a line of other flags, they should be in the centre of the first line.

A damaged or dishevelled flag would not be displayed. It would not be used as a drapery, except in a State or military funeral. No advertisements would be attached to the pole from which the flag is flown and it would not be flown simultaneously with other flags.

A separate model set of instructions have been framed for hoisting the flag in schools, colleges and sports camps.

43-LETTER ENGLISH ALPHABET

A new English alphabet of 43 letters, which enables children to read in two weeks' time, will be taught to 1,000 children in 24 British schools this autumn.

The University of London Institute of Education said the new alphabet drops the letters P and X and adds 19 new ones, and cuts the time needed for children to learn to read by 50 to 10 per cent.

In one preliminary test, 14 non-reading children learned to read within two weeks of using the new alphabet.

Present plans are to test another 1,500 children next year and extend the experiment thereafter.

THE FIRST MATCHES

It is hard to believe that until about 1835 a tinder box was the only means in many British homes to provide a fire. The first matches had come from France in about 1810 in what was called an 'instantaneous light box'. This contained a small bottle of sulphuric acid, and some sticks with chlorate of potash on the end. When dipped in the acid they provided the flame. A Mr. Samuel Jones, who lived in the Strand, London, had brought out rather similar Promethean matches in 1828.

It was a John Walker of Stockton-on-Tees who invented the match in the style of today. These 'friction lights' were sold in round tins with a piece of sandpaper through which the head of the match was drawn to produce the flame. The first sale was recorded on April 7, 1827. But, though urged to patent the invention, Mr. Walker did not think it sufficiently important. So it was the active Mr. Mamuel Jones who brought out an exact copy and named them lucifers. These early matches were liable to burst into flame inadvertently, often with tragic results and it was not until 1855 that a Swede invented the safety match.

* * *

THE FIRST BANK NOTE

The 300th anniversary of the first bank notes to be issued in Europe was celebrated in Sweden on July 16, 1961. They were issued in 1661 by Johan Palmstruch, founder of Sweden's first bank, Stockholms Banco, to replace the then heavy square copper coins which weighed up to 40 lbs.

The Swedish Riksbank is commemorating the jubilee by publishing a work written by the Latvian-born numismatic expert Aleksandrs Platbarzdis. The book, "Sveriges forsta banksedlar" (Sweden's first bank notes), has been distributed to central banks and banking researchers throughout the world.

In conjunction with the Jubilee the Riksbank has put into operation a new press which is said to be unique of its kind in the world. The 35-ton unit has been designed by the bank's experts and built in Darmstadt, Germany. While it has previously been necessary to print the notes in six or seven separate operations, the new press first prints the back of the notes in two by two colours in dry offset and then the face in copper-plate with facsimile and numerals. By means of the new press it will be possible to reduce the printing of an issue of notes from months to weeks.

* * *

WORLD'S MOST WIDELY SPOKEN LANGUAGE

A list containing 130 languages and dialects, ranging from Afrikaans to Zulu, has been published by the newly founded International Languages Archives in Washington.

The director of the archives is Professor Siegfried Muller. The list includes only those national languages which are

spoken by at least a million people. The figures are based on information obtained from United Nations delegates and linguistic experts.

There are some surprises: for example, French (65 million) and Italian (55 million) take only the eleventh and twelfth places in the table. Chinese leads with 460 million.

Then follow English (250 million), Hindustani (160), Spanish (140), Russian (130), German (100), Japanese (95), Arabic (80), and Portuguese and Bengali (76 million each).

Three Chinese dialects which are not identical with Mandarin Chinese—Wu, Cantonese and Min take the 13th, 14th and 15th places.

Both Ukrainian (35 million) and Korean (33 million) are more widely spoken than Dutch-Flemish (17 million) and Hungarian (12 million).

No geographical information accompanies the linguistic statistics and for this reason no layman can tell from the list where such languages as Hakka, Hausa, Fula, Ibo, Galeo, Lolo, Santali, Xhose or Bagri can be heard.

* * *

SUBMARINE MOUNTAIN DISCOVERED IN INDIAN OCEAN

A mountain over 9,000 feet high has been discovered in the Indian Ocean 550 miles south-east of Ceylon by scientists aboard the Soviet oceanographic research ship "Vityaz" charting the ocean floor. The mountain is a volcanic cone with several peaks, the highest of which lies about 5,000 feet below the ocean surface. The crew of the vessel named the mountain "Afanasi Nikitin", after the first Russian traveller to sail the Indian Ocean.

The discovery was made during one of the two expeditions carried out by the "Vityaz" as part of the programme to explore the Indian Ocean at present being organized by the International Committee for Oceanographic Research and in which many nations are taking part.

During the voyage, Soviet scientists also attempted to ascertain the thickness of the earth's crust which, according to their findings, is about five miles in the middle of the Indian Ocean.

* * *

PENFRIENDS IN KANSAS FOR SWEDISH TEENAGERS

Not long ago, members of the Kansas Unesco organization in Lawrence, Kansas, United States, learned through "Unesco Features" that teenagers in Sweden were seeking pen-friends abroad, and that the Swedish Post Office had entrusted one of its employees, Mr. Erik Lindgren, with the job of finding them.

Kansas Unesco wrote to Mr. Lindgren offering to help, and received a reply saying that many thousands of young Swedes wished to correspond, in English, with teenagers abroad. Mr. Lindgren described how authorities in Sweden, realizing that person-to-person communication could do much to promote international understanding had last year issued a book called "Instruction in the Art of Letter Writing". As a result, the Central Committee for International Exchange between Schools in Sweden had been swamped with requests from Swedish boys and girls for penfriends abroad. The Post Office came to the rescue by releasing Mr. Lindgren from his ordinary work to help the Committee.

Boys and girls in other countries who would like to have a Swedish penfriend should write to: Mr. Erik Lindgren, Box 106, Lund 6, Sweden.

A GIANT IN MAKING

Sixty kilograms (about 132 pounds) is the weight of six-year-old Sasha Baturin who lives in Tomsk Region of Siberia.

He is 126 centimetres tall, his chest measurement is 95 centimetres and the boy is as strong as an adult. At birth Sasha weighed 4.5 kilograms and did not differ in any way from other babies. A tempestuous period of development then began; the boy grew literally not by days but by hours. Sasha Baturin's mental development corresponds to his age. He likes very much to play and to go to school.

In spite of his great physical strength Sasha is gentle, affectionate and obedient.

BRITISH EXPEDITION CLIMBS 'WHITE SAIL' PEAK

According to a message received in New Delhi on July 24, the British Derbyshire Himalayan Expedition had climbed the 1,149-foot-high White Sail peak in the Panjab Himalayas.

The message from the Leader of the Expedition, Mr. Robert Pettigrew, said that three persons, Mr. J. Ashcroft, Mr. Derrick Burgess and Mr. Pettigrew himself, reached the summit on July 16.

The **White Sail** peak was climbed earlier only by Lt.-Col. J. O. M. Roberts of the Gurkha Rifles, nearly 20 years previously.

The Expedition had earlier climbed the 17,000-ft. and 17,692-ft.-high **Manikaran Spires** in the Kulu Valley.

On June 20, two members of the Expedition had climbed the 19,687-foot-high **Deo Tibba** peak. Earlier reports had said that Expedition had failed in its main objective of climbing the 20,140-foot-high **Idrasan** peak.

CLEAN MONEY

In France it will soon no longer be accurate, from the physical point of view, to talk about "tainted money" or "filthy lucre", said Thomas Cadett, BBC correspondent in Paris, in a recent broadcast. The Bank of France has announced that henceforth all notes it issues will contain a powerful disinfectant, capable of killing the microbes that can at present be found on the nation's paper currency. According to the scientists, the worst offenders were the notes of lowest value which changed hands most often. After only a few weeks in circulation notes worth 500 of the old francs or 5 of the new had been found to carry a choice collection of up to 60,000 micro-organisms responsible for many infections ranging from tuberculosis to minor complaints. Coinage had been found to be far cleaner than notes, with an average of only 5,000 micro-organisms apiece.

NUFFIELD FOUNDATION TRAVELLING FELLOWSHIPS

The Nuffield Foundation's 16th report, covering 1960-61 and published on July 17, 1961, illustrates how its founder, millionaire British industrialist Lord Nuffield, who began it in 1953, shares his wealth for the benefit of mankind. During the year the Foundation's grant allocations passed the £2,000,000 mark and covered a wide variety of causes ranging from the advancement of health and prevention of sickness to soil research.

Forty of the grants went to 15 different Commonwealth countries and territories.

ries. Much of the aid was to help less economically advanced areas with their medical, agricultural, educational, and cultural needs.

For the third year in succession, two travelling fellowships have been awarded to Indian civil servants. They are Mr. N. J. Kamath, of the Ministry of Information and Broadcasting, who is studying State policy in the distribution of industry and State controls over prices of materials, with particular reference to nationalized industries; and Mr. C. S. Ramachandran, of the Ministry of Commerce and Industry, who is examining the organization of industry for export.

Foundation travelling fellowships in medicine have been given to one Indian, in natural sciences to two, and in engineering to one.

The resources of the Foundation consist of a fund of £10,000,000 provided by Lord Nuffield, and of gifts and bequests from other people. Prominent among its many activities are the promotion of medical, scientific, and social research and the development of medical services and of technical and commercial education. It also provides fellowships, scholarships, and bursaries in many Commonwealth countries.

* * *

WORLD WALKING RECORD BROKEN

French champion walker Pierre Gilbert Labbe broke an endurance walking record on Sunday, July 9, 1961 at Narbonne (France), having walked 154 hours without sleeping.

Labbe started on July 3 and stopped on Sunday, thus breaking his former record of 121 hrs. 17 min. 50 sec.

* * *

NEW TYPING RECORD

Sigrid Wiesel, a 28-year-old teacher in a school of commerce in Hanover, is champion in speed typing. She achieved this distinction at the 24th Intersteno Congress in Wiesbaden in which stenographers and typists from 24 countries took part. The typing test lasted 30 minutes during which Sigrid Wiesel made 17,782 strokes with 24 mistakes. The champion in perfection typing—Erika Berkenkamp, a 30-year-old secretary in an industrial firm, holds the record of 5,139 strokes in ten minutes without a single mistake.

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FILM WORLD

NO RELAXATION OF CENSOR RULES

Dr. B. V. Keskar, Minister of Information and Broadcasting, said in the Lok Sabha that some time back a group of film producers met him and complained regarding the question of interpretation of the directives by the Censor Board.

The matter was still under discussion with the producers concerned and also the Board. A careful and detailed examination was being made regarding the interpretation of the directives.

There was no question of making the censor rules lenient. The problem concerned the correct and reasonable interpretation of the directives framed by Government. The matter was being thoroughly examined in order to see that the directives issued were carried out correctly.

WORLD FILM FESTIVAL IN INDIA

Thirty-six countries have decided to participate in the International Film Festival of India to be held in New Delhi from October 27 to November 2 this year. In addition, the United Nations and its specialised agencies will also be taking part in the festival, according to an official statement.

To meet the convenience of the film industry, the Government of India has decided to change the dates of the film weeks to be held in Calcutta, Madras and Bombay, the three major film-producing centres, following the festival in Delhi.

The film weeks will now be held in Calcutta from November 3 to 9, in Madras from November 7 to 13 and in Bombay from November 10 to 16.

The 36 countries joining the festival are: Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, Ceylon, China, Czechoslovakia, Denmark, Germany (Federal Republic), Germany (Democratic Republic), Ghana, Greece, Hungary, Italy, Japan, Malaya, Mongolia, Morocco, the Netherlands, New Zealand, Pakistan, Poland, Rumania, Spain, Sweden, Switzerland, U.A.R., U.K., the U.S.A., the U.S.S.R., Viet-Nam (Democratic Republic), Viet-Nam (Republic) and Yugoslavia.

SINGAPORE CINEMA GETS U.S. AWARD

The Cathy Cinema in Singapore has been awarded the first prize in the Overseas section of the Annual Quigley Grand Awards for Snowmanship for 1960.

The Competition is held annually by the Quigley Publishing Company of New York, which publishes "The Motion Picture Daily," "The Motion Picture Herald" and several other newspapers and magazines connected with the cinema and entertainment business.

Last year's annual competition, the judging for which was completed in August 1961, was the 27th year of the Quigley Grand Awards Contest. This was the first time that a cinema organisation in the Far East has won this top prize.

The successful entry was the Cathay's publicity campaign for the Twentieth Century-Fox picture, 'Can-Can,' when the publicity department of the Cathay undertook a variety of "stunts" to publicise the picture, including a special "Parisian Night" at the Cathay Restaurant.

There were 14 judges of the contest—owners of theatre chains, film producers, leading advertising and publicity executives and newspapermen of America.

INDIAN 'SHORT' WINS PRIZE

At the international film festival at Locarno, the first prize for short films was awarded to the Indian documentary on the life of Rabindranath Tagore, produced by Satyajit Roy.

The Festival Jury gave its second prize in this category to a Chinese film, "Where is Mama," filmed in Shanghai.

STUDY-TRAVEL AID TO DRAMA TROUPES

The Union Government has announced a scheme for "study travel grants to professional troupes" to promote the study of drama techniques.

The scheme will be confined to those who are registered under the Registration of Societies Act XXI of 1860 and who have

been selected for assistance under the scheme for the production of new plays

Each troupe selected for assistance will be eligible to send during the year a batch consisting of not more than five persons to study the techniques adopted by other troupes. The expenditure incurred on the visits will be met by the Union Government, subject to a maximum of Rs 2,500 per troupe in a year.

Troupes desirous of participating in the scheme should apply to the Ministry of Scientific Research and Cultural Affairs in New Delhi in the prescribed form at least one clear month before the journey is to commence

On approval of the programme by the Government, 50 per cent of the total anticipated expenditure will be given as an advance to the institution on the condition that, if the tour does not materialise, or the actual expenditure incurred is less, the entire advance or the balance amount on hand as the case may be will be refunded to the Government

On completion of the tour, each group will have to submit a report to the Government

Full particulars relating to the scheme may be obtained from the Secretary to the State Sangeetha Nataka Sangam, Madras-20, or the Ministry of Scientific Research and Cultural Affairs New Delhi

U.K. WINS TOP PRIZE AT VENICE

The Grand Prix at this year's Venice International Documentary Film Festival was awarded to the British Transport Commission's 'Terminus' produced by Edgar Anstey and directed by John Schlesinger. Diplomas of Honour went to Shell Petroleum for 'The Captive Laver' and to Granada Television for 'Boer War'

In the International Festival of Films for Children the first prize for feature films was awarded to 'The Day' produced by Peter Finch. 'The Treasure of Ice-Cake Island,' produced by Ilalas and Batchelor for ABC Television was awarded second prize for television films and 'Prelude To Power,' produced by the Film Producers Guild (Greenpark Productions) for the Educational Foundation for Visual Aids, gained a similar award in the educational and didactic films section

GERMAN CAMERAS TO BE MADE IN INDIA

India will produce the German Democratic Republic's "Pouva Start" film camera according to a Tass report from Berlin

Quoting the GDR News Agency, the report said that the German Democratic Republic would supply India with a complete plant which would enable the production of 300 cameras in eight hours

The plant, which is ready for export in the Karl Pouva Works at Freital in East Germany, will be set up in Calcutta

NEW ANIMATION PROCESS

A new animation process, called Xerox, was employed by Walt Disney in the production of his new Technicolor cartoon feature '101 Dalmatians', making it possible for the first time for the artists' original drawing to appear on the screen thus bringing greater clarity of character movement and expression

Prior to the use of Xerox in the film, the animators' drawings were traced with ink and painted onto transparent 'cels' for photographing. The Xerox process now makes it possible for the original drawings to be painted and photographed thus eliminating the inking step in production

The use of Xerox heightens character expression, movement and the overall dramatic effect due to the fact that audiences will be exposed to the artists' untouched concept of the characters and action

Based on Dodie Smith's popular modern-day comedy-fantasy, '101 Dalmatians' relates the adventures of a song-writer, his wife and their pet Dalmatians whose puppies are stolen by a villainess with a passion for Dalmatian fur coats

FILM PRODUCTION IN RUSSIA

The average of feature film production in the Soviet Union is one film every three days

(India's output was almost one film a day last year)

Feature films are produced in about 20 studios. Besides the biggest ones like Mosfilm and Lenfilm, all Union Republics have their own studios

Apart from the studios producing fea-

(Continued on page 942)

Readers' VIEWS



PSYCHOLOGY OF ADOLESCENCE

Sir,

Adolescence with its energy, exuberance, dignity and spirit of independence offers a befitting introduction to youth. The period of adolescence usually extends over teens and really closes with man-hood or woman-hood. It is the stage in life when immaturity approaches maturity. Adolescents of all the countries exhibit similar characteristics, subject to modifications against a particular cultural background. Adolescence is not an isolated stage, but is the product of a continuous development from infancy through childhood. The foundations of any period may be traced to the preceding one. Maturing of reproductive functions and various physical, mental and moral changes bridge the interval from child-hood to maturity.

During this period an adolescent tries to establish himself as an independent individual capable of managing his own affairs. He challenges not only the authority of the adults and the values established in home and society but also questions most of the common beliefs. Too much interference is strongly resented. Out of this struggle for emancipation from psychological dependence on others emerges his own philosophy of life. His bid for independence is, however, interpreted as rebelliousness and it is also ignored that it is the age when 'new self' gathers its force to strike out even on its own self.

The neglect of sex-training makes adolescence often a critical period of development. As the cultural standard holds all sex desires, thoughts or acts to be indecent or guilty and forbids an open discussion of them, so when sex drives occur, a conflict between the sexual need and the sense of guilt is likely to result. Thus, while trying to establish relations with opposite sex or arriving at a solution of love-life he sometimes creates more problems than he solves.

The choice of a career and the necessity of self support brings most persons in late adolescence face to face with the economic realities of life. As most of them do

not get the facilities and opportunities to work out a suitable career, many young people find a serious gap between their aspirations and achievements. Their failure often creates in them the attitude of inadequacy and inferiority and chances of a "balanced personality" are minimised.

Adolescence is a difficult period not because of any inherent defects in it but because of the conflicts involved in the solution of various adjustments and the ignorance of the psychology of adolescence on the part of seniors. Parents often add to the confusion by refusing to recognise the growth of the child and thereby putting premium on his failings. It is commonly heard "Leave him: he is still a child." The consequences are often disastrous. The foundations of life are shaken and an undisciplined adolescent, while desiring an integration of his personality on his own terms, unleashes forces that cause disintegration of society at large.

Notwithstanding the shortcomings of adolescence it can't be denied that it possesses potentialities, which, if properly developed may usher in an era of great events. But it demands two things—a democratic spirit, and proper education. The democratic spirit has yet to be developed and lack of education is the more serious obstacle of all. We do not realise that young one matures quickly in an atmosphere of freedom, activity, recognition and opportunity. Freedom does not mean absence of control, but rather an opportunity to order his actions to accomplish results for which he may share responsibility. He can become self-controlled and self directed only under wise guidance, mature judgement, and experience. The actual amount of freedom would however, in any case depend upon the youth, his previous training, his parents and the environment.

We have to discard the traditional attitudes and to take into account the psychological changes that have come over the adolescents during recent years. So a revised code of conduct, both for home and society, in consonance with the peculiarities

of this age is the primary need in order to strengthen the fibre of the nation.

(Indra Batta, Agra)

THE WELFARE STATE

Sir,

It is quite true that the words, "Welfare State" have acquired a more specific meaning today, which consists not only in abandoning the policy of laissez-faire and performing some other activities appreciable to a certain extent, but also in guaranteeing to every citizen a minimum standard of living, and providing free and compulsory education to all children up to the age of 14 years and even more. These are some of the ideals of a welfare state in the specific sense of the term.

Coming to things nearer home, it may be said with a sense of pride and jubilation that the Free India no more has **zamindari system**; she is constantly laying emphasis on obliterating all distinctions in castes and classes. For the speedy upliftment of the poor and the down-trodden, she INTER ALIA has a Central Social Welfare Board; she is opening year by year more and more schools; she has introduced many a tax; she has enacted laws like the Estate Duty, the Wealth Tax and the Expenditure Tax on the rich propertied classes. The aim of all this is obviously to liquidate over-capitalism and to curb the activities of various individuals to amass great wealth. In the direction of health and sanitation also, India is doing all that she can. And thus it becomes clear that ideals of present India are those of a welfare state. But is India a welfare state? The answer unfortunately is: "No yet in the specific sense of the term." Still, we have to solve the unemployment problem: free and compulsory education to all children has to be provided; poverty and insecurity have to be eradicated; much has to be done in other spheres also.

In India, the welfare of the people did not receive any serious attention at the hands of our British rulers. They left a legacy of widespread poverty, ignorance and disease in the country, and our Government has to struggle hard to improve matters. It set with courage and determination and today Free India is fast marching towards the goal of a welfare state. Our Government's earnestness in the matter can be judged by the fact that in our Five-Year Plans, suitable allocation is made for edu-

cation, health, housing, labour welfare, rehabilitation etc. Because our resources are limited, because our economy is yet undeveloped and because we have a very large population—which is growing at a fast rate—the progress in materialising all ideals of a welfare state, has been slow in the country. But I am sure, sooner or later, India will emerge as one of the greatest welfare states of the world.

(Rajendra Prasad Goswami, N. Delhi)

FRIENDSHIP BETWEEN INDIA AND PAKISTAN

Sir,

Recently, President Ayub Khan in course of his reply to an address of welcome by Basic Democrats of Ziarat and Sibi districts of Pakistan, said, Prime Minister Nehru and his colleagues "lacked statesmanship" and if he (Ayubkhan) had been in India, he would have "definitely responded to the hand of friendship offered by Pakistan".

The above statement of President Ayub Khan gives a strange reading as the whole world is aware of the fact that India has been trying her utmost to maintain friendly relations with Pakistan even at the cost of some concessions she has to make for Pakistan from time to time. But the more Pakistan gets the more she wants. Only the other day, our Prime Minister, Shri Nehru reasserted that India wants Pakistan to prosper, but the latter has chosen to be militarily strong rather than to prosper economically. To consolidate the hand of friendship, India had long offered to Pakistan a mutual non-aggression pact, which is the basic and fundamental guarantee of friendship, but Pakistan did not reciprocate this gesture of friendship from India for the reason only known to herself. This offer is still opened to Pakistan as has been disclosed by our Prime Minister from time to time, and, as such, it is now upto Pakistan to respond in this behalf. Against this background it is difficult to understand what meaning has been attached to the term "Friendship" by President Ayub Khan. If he is actually guided by a sense of genuine friendship he has to fulfill his own obligation first, instead of dictating terms of statesmanship to others.

(Hemkant Chetia, Shillong)

DOWRY PROHIBITION ACT

Sir,

The Dowry prohibition act has come into operation all the country over on July, 1. It penalises the demanding, giving or taking the dowry directly or indirectly. Exception has been made in respect of gifts i.e. presentation and acceptance of gifts will not be deemed as dowry. This measure has opened a new chapter in the realm of social institutions of our country and will occupy an important place in the annals of Indian history. This step is most welcome and is in the right direction, it seeks to revolutionise our social thinking and ultimately it will strengthen the hands of our social workers and social organisations in their crusade against the dowry system and in educating the illiterate masses particularly in the country-side. This legislative measure will emancipate the community from such evils as have been eating into the very vitals of our social fabric. It is befitting to remark that our central legislative body has given a gift to the Indian masses in the form of this act. The coming generations will be grateful to their forefathers for this nice present.

But mere enactment is not enough to do away with this deep-rooted dowry menace. It should be supplemented by such pattern of education as will mould the younger generation in this respect and ultimately it can help in the attainment of the aim which our parliament has set before it. The most effective way to eradicate this centuries-old vicious system would be to speak on this subject to school children. If they can be made conscious of its evil effects, the curse would automatically disappear from our country.

(Yashpal Ghai, Ludhiana)

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THEORY AND PRACTICE

Sir,

Theory and Practice are two different aspects in one's life and assimilation of both in one's ingenuity is a rare phenomenon. From the academical results that come out every year from the Boards of Secondary Education as well as from the Universities it can be seen that students passing in the lowest division outnumber the total of other divisions. This theoretical application of judgement of one's ability is faulty in nature. Had it been the true rod of measure, the bulk of soldiers who

fight for the nation in this modern mechanised warfare would not have been illiterate. Hitler was reckless in his boyhood. Churchill was allergic in mathematics, yet he became the Chancellor of Exchequer of England. Pathetic is the case of our youths who are ranked, as they are, by means of divisions as per marks obtained in the 3-hour examination. Viswa-Bharati has abolished the degree of 3rd class in M.A. And such step in this direction is highly appreciable.

It is really painful to blot one's career at the very threshold of one's entering real life and the heavy depression and discouragement that prevail in one's mind psychologically by such standardisation. In the field of education many commissions submitted their findings and one commission went to the extent of earmarking jobs for particular academical qualifications, including the 3rd class rated passed students.

A feeling is running high to do something tangible to do away with such classifications in vogue.

(Radha Benode Mukherjee, Bhadra)

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OUR NATIONAL LANGUAGE

Sir,

In the "Careers And Courses" of August, 1961 an article published under the heading 'A Plea for the use of English' advocates the use of English as National Language in India.

Well, in a broad sense, while adopting a national language—even if we are liberal enough by our Constitution to recognize any language of the world as our National Language, we should not be indifferent to the interests of our countrymen. Only the richness of literature and greatness of script of a language do not matter, the thing that matters is the relation of the language with the large number of countrymen, though the former two factors cannot be overlooked at all.

The English language may be an international language, may have the most developed literature, but the promulgation of the language in the land where it had no provenance sounds most fantastic.

So in this case the question of adopting English as a National Language does not arise, because in the present phase of country there are more than 75 per cent people who know nothing of English.

Then comes the question of 'What after

English?' Because there are more than 148 dialects spoken on the Indian soil and more than 14 have taken the shape of languages and with the question of adopting an Indian language as National Language, the serious problem of linguistic provincialism confronts the Indian Nation. But the problems are solved only after facing problems. So while deciding the fate of a national language for India, it is but an essential of our life to adopt a language which is spoken and understood by a number of nationals which is perhaps Hindi—also so wisely adopted as the National Language by the Constitution.

However, we should never think in terms of expatriating the English as language because it has got an esteemed international position and in a state of affairs when the entire world has come into very close relations. We should honour English as a language of great importance.

(Dev Raj Sharma, Bilaspur)

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FARMING

Sir,

Even after fourteen years of Independence, we are not sufficient enough to meet our growing food demand. Every year tons of inferior foodgrains are imported from foreign countries to feed our teeming millions. Food problem has baffled the higher authorities to a great extent.

The reason for this shortage is not far to seek. Our villagers, who are farmers, find to their dismay, that after school or college education, their sons never adopt farming as their profession. Really speaking, they never call it a 'profession'. Farming is thought to be exclusively meant for dull headed persons, not fit for any other work. Uneducated parents want to send their educated sons in service. After matriculation or graduation, most of them waste sufficient time and money at travelling and lodging in different cities just to secure petty employments.

In case an educated farmer's son joins his paternal profession he can produce all the consumable articles of food from his fields and to step up food production, government distributes chemical fertilizers to farmers on loan. An educated farmer can consult the agriculture Inspector about various diseases which are the menace for his standing crops.

The difficulty with farmer's educated

son to adopt his paternal profession is that his produce is consumed in meeting petty demands of his family. At the time of marriage, he has to take loan from the village money lender, who charges high interest. Government has, no doubt, banned giving and taking dowry but this law has not effected the farmers at all. Marrying a daughter poses a great problem in view of rising prices these days. Litigation is another drain on the resources of a farmer. It is a happy sign that government has set up Panchayats in villages to settle their disputes at the village level itself.

Our Government should strain every nerve to popularise farming among educated youngmen. Liberal grants should be given to those who want to purchase machinery for this purpose. Educated farmers should be sent to foreign countries to get first hand information about the methods adopted there. Prizes should be awarded to those educated farmers who beat the previous records established by uneducated farmers using latest mechanical equipment.

(S. S. Sahrai, Naraingarh)

FILM WORLD

(Continued from page 938)

ture films, there are approximately 30 others for documentaries, news-reels and popular science films.

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UNIVERSITY FILM COUNCIL

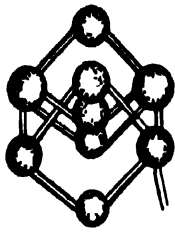
Ten more universities have joined the University Film Council which was recently formed with a view to developing the right values in university students.

Sixteen universities, including Bombay and Madras, are already members of the Council. The universities are given a grant by the University Grants Commission.

A preview committee for selecting suitable films has been set up, with representatives from the Ministries of Education and External Affairs, the University Grants Commission and the Children's Film Society.

The films will cover a wide range of subjects and languages, but would be selected depending on how far they help the students in developing their critical faculty.

Booklets written in simple language on certain technical aspects of film production are also being prepared by the Council for the benefit of the students.



SCIENCE

& INVENTION

SPACE EXPLORATION BY U.S. SCIENTISTS

The successful orbiting of the 5th U.S. satellite—Explorer XIII—on August 25, 1961 serves to point up the remarkable progress of America's Space Programme in the 3½ years since the nation's first satellite was sent aloft.

Balanced against the 50 American satellites (two of them in orbit around the sun) are 16 Soviet space successes.

Thirty-two American spacecraft are still in orbit and 14 of these are radioing information back to earth. They are of practical benefit as meteorological, communications and navigation satellites with a tremendous potential for service to science and mankind.

The United States has also scored a number of spectacular "firsts." These include the first recovery of an object from orbit (the Discover 13 capsule in mid-1960) and the first launching of two satellites (a navigation satellite and a smaller research satellite) with one rocket Transit II on June 22, 1960.

In geophysical discovery and space science work, U.S. satellites have recorded many new findings which include:

—Finding by Vanguard I that the earth is slightly pearshaped, not slightly flattened at the poles as previously thought.

—Discovery of the Van Allen radiation belts, and an electric current ringing earth at a height of about 40,000 miles (64,000 kilometers).

—Direct evidence that interplanetary space is not a vacuum, but is filled with invisible but powerful energetic particles interplaying with magnetic fields.

—Discovery of "solar winds," periodic eruptions of hydrogen gas that stream earthward from the sun causing magnetic storms, auroral displays, and radio communications blackouts.

—Finding that the ionosphere (on which long distance radio communications depend) extends several hundred miles deeper into space than formerly believed.

America's Man-in-Space Programme progressed with astronauts Alan B. Shepard and Virgil I. Grissom making brief sub-orbital flights in May and July. They piloted one-tone Mercury spacecraft more than 100 miles (160 kilometers) up and 300 miles (480 kilometers) out over the Atlantic Ocean.

Eighteen out of 28 Discoverer satellite launchings have been a success. Discoverer 13 was particularly noteworthy because it made space research history. On August 11, 1960 it ejected a gold-plated capsule that was recovered at sea, the first recovery ever of an objective from earth orbit.

Eight days later the capsule from Discoverer 14 was recovered in mid-air, a feat considered nearly impossible a year earlier. This feat was duplicated with Discoverers 17, 18 and 26. One other Discoverer was recovered at sea on June 18, 1961.

Pioneer V was preeminent among the scientific satellites sent up to investigate geophysical phenomena and inter-planetary space. Designed to test extremely long-range communications and to find out more about sun-earth relationships, it achieved all major objectives. It sent back a wealth of scientific information on magnetic fields, solar storms and recorded the most distant radio transmissions from earth—22,462,740 miles (35,940,384 kilometers).

Launched March 11, 1960, Pioneer V went into orbit around the sun, which it will circle once every 311 days for millions of years.

The United States placed the world's first meteorological satellite (Tiros I) in orbit April 1, 1960, to test television techniques leading to a worldwide weather information system. The first Tiros televised back more than 22,000 photographs of cloud cover and detected a number of major storms at sea.

Meteorologists learned that cloud systems over the earth's surface exhibit an unexpectedly high degree of organization.

Tiros II and III followed and both are still sending back excellent cloud photos for use in weather analysis.

Four Transit navigation satellites have been launched successfully, the latest on June 29, 1961. They are the forerunners of satellites that will furnish ships and aircraft with their precise position in all kinds of weather.

An atomic generator, the first ever sent aloft in a satellite, powers the radios in Transit IV-A, the latest navigation sphere.

The generator converts the heat of radioactive decay of plutonium into electricity. Being small, housed inside a satellite and extremely long-lived, it holds a big advantage over solar cells exposed to cosmic "dust" and radiation on paddlewheel arms.

Echo I, the world's first communications satellite and perhaps the most spectacular of all because it can be seen by the naked eye, was launched August 12, 1960. The 100-foot diameter aluminized balloon was an experiment in passive communications via space. The sphere still is being used as a relay for message bounced off it between two stations on earth. Besides performing a number of successful voice transmissions, it was used to reflect photos.

Courier 1-B, the first active communications satellite, was launched October 4, 1960. It carried electronic gear to store messages sent up from earth for relay later to other stations.

Thirteen satellites in the Explorer series, some of them still operating, have returned valuable data on the Van Allen belts, magnetic fields, radiation, cosmic rays and micrometeoroids in space.

MOON MAY GIVE CLUES TO ORIGIN OF LIFE

New clues to the origin of life may be discovered when man reaches the moon, according to a paper presented by three scientists to a recent joint meeting of the Institute of Aerospace Studies and the American Rocket Society in Los Angeles, California.

Unlike the earth, the moon is an object in which organic deposits may have been preserved unchanged, thus making it easier to determine their origin.

The scientists offered a plan for chemical analysis of the moon's surface by means of gas chromatography. Lunar samples would be converted to gas to disclose their chemical composition. They believe the results may help to explain the evolution-

nary transition from non-living to living matters.

A study programme on the design of the necessary gas chromatograph apparatus is now underway at the Jet Propulsion of the California Institute of Technology in Pasadena, California.

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EARTH'S CRUST UNDER INDIAN OCEAN

Soviet scientists have determined, for the first time, the thickness, structure and relief of the earth's crust under the Indian Ocean, the well-known geologist and mineralogist Dr. Bezrukov told the Presidium of the Soviet Academy of Sciences in Moscow on August 25, 1961. He was reporting on the scientific results of the two expeditions in the Soviet ship "Vityaz" in the Indian Ocean in 1959-1961.

In studying the relief of the ocean floor, Soviet scientists discovered several hitherto unknown submarine mountains and ranges. One of the mountains, lying in the central part of the Ocean, was named after Afanasy Nikitin, the first Russian traveler who reached India to establish contacts between Russia and India.

At the session of the Presidium Panteleimon Bezrukov, who was in charge of the expedition, demonstrated photos of the bottom of this vast water basin. Explorations have shown that rocks of volcanic origin occupy a large proportion of the bottom of the Indian Ocean. Investigating its composition and structure the Soviet geologists detected in the southern part massive accumulations of iron manganese ores containing up to 0.5 per cent of nickel, cobalt and other rare metals.

Explorations and observations have shown that the fauna in the Indian Ocean is very varied. The scientists from the "Vityaz" collected a large number of animals and fish living on the bottom, hitherto little explored or absolutely unknown to science.

Scientists studying the chemical composition of water established that the amount of oxygen in a greater part of the Indian Ocean is sufficient for the life of fishes and marine animals. The only exceptions are the Arabian Sea and the Bay of Bengal where oxygen content drops to zero in some places. This is explained by insufficient vertical circulation of water in the area, Bezrukov said. In those areas, Soviet

explorers also found large amounts of hydrogen sulfide, which has a harmful effect on fauna

The expedition discovered promising fisheries, and specifically large tuna fisheries south of Indonesia

12 scientific teams, comprising most diverse specialists functioned on board the 'Vityaz'. The 'Vityaz' scientific expeditions were held under the international programme for the exploration of the Indian Ocean.

Beziukov pointed out that the Indian Ocean was not selected without reason for scientific exploration. As one of the specialists aptly put it, scientists hitherto knew less about the bottom of this vast reservoir than about the surface of the moon.

Over 20 countries will take part in the scientific exploration of the Indian Ocean. The expedition on the 'Vityaz' was one of the first marking the beginning of the further exploration of this ocean.

UMBRELLA THAT COOKS

An umbrella that cooks food attracted considerable attention in Rome on August 25, 1961 at a UN conference on new sources of energy.

In bright sunlight the cooker is capable of producing the equivalent of 400 watts and can boil nearly a quart of water in 22 minutes or even cook food.

Delegates to the UN conference were fascinated by the solar cooker which gets its energy from a reflector in the form of an umbrella.

The umbrella consists of 16 parabolic shaped parts made of composition plastic covered with aluminium which unite to form a circular reflector mounted on a tripod. The focus is located 46 cm below the umbrella and it is there that the food is grilled. The entire cooker can be packed in a small valise and weighs less than six pounds. The present price is about \$30. The solar cooker is manufactured in Denver, Colorado, in the U.S.A.

The only drawback to the "cooking umbrella" is that a sudden gust of wind can tip it over.

NEW PLANET

A young Italian amateur astronomer said in Bergamo (Italy) on Thursday

August 24, 1961 that he had photographed something that might be hitherto an undiscovered planet next to the sun.

Aldo Bonassoli said he had informed Japanese scientists of this and that they had confirmed his suppositions.

Bonassoli took a photograph during the recent eclipse of the sun on which appeared a detail he said other scientists had missed. He told newsmen that this detail might be a planet in an orbit near the sun.

NEW DRUG INCREASES INTELLIGENCE

Now on sale in the United States is a new drug that it is claimed increases a child's intelligence quotient by up to 50 points—100 being the average IQ.

The drug known as Deanol is manufactured and sold by a Los Angeles laboratory. Besides making children better students it makes many of the more backward ones happier too because through its use they begin to learn.

When the drug was tried out on an 11-year-old boy who had murdered a younger, crippled child his IQ increased from a mere 14 to the slow normal level.

In 100 days on 400 children, the drug produced a marked increase in intelligence but only 3 per cent.

CAR THAT DRIVES ITSELF

The British Ministry of Transport and research laboratories have just demonstrated a self-steering car.

During the demonstration it sped round the laboratory's new test-track with the driver's hands on the windscreen. The steering wheel turned by itself.

Cornerings were taken at 30 mph and the vehicle was driven at more than 40 mph on the straights. The car—a French Citroën—is steered electronically and the secret of the process is a cable buried under the test-track.

The apparatus in the car picks up signals from the cable and guides the car so that it is always over the cable.

This uncanny device is only one of many now under test at the laboratory. Main object is to solve Britain's big driving headaches—fog.



MR. JOMO KENYATTA

Mr. Jomo Kenyatta, the idol of millions of Kenya Africans who was released on Monday, August 14, 1961, was once a kitchen boy, a subordinate municipal employee in Nairobi and a farm labourer in England.

Today he is the undisputed leader of the Africans in Kenya.

Though he has given his age as 71, he looks much younger. He is extremely agile, physically and mentally, and his hair is merely flecked with grey.

Of his early childhood little is known except that when ten years of age he walked into a church of Scotland mission at Kikuyu saying he was an orphan. At that time he was suffering from a spinal disease, for which he was operated on by two European doctors who saved his life.

Later, he worked as a kitchen boy, underwent training in carpentry and found employment in the water department of the Nairobi Town Council.

It was from these humble beginnings that "Burning Spear," as he is known all over the world, made his appearance on Kenya's political stage. This was in 1922, when he joined the Kikuyu Central Association, a revival of the defunct young Kikuyu Association founded by Mr. Harry Thuku which was the first manifestation of Kikuyu political consciousness. Mr. Kenyatta edited the Central Association's journal, "Mwigwithania" and became secretary of the organisation.

In 1929 he went to Britain, accompanied by Mr. Isher Das, an Indian elected member of the Kenya Legislative Council, to submit a petition to the Colonial Office on certain Kikuyu land grievances and to demand direct election of Africans to the Council. The Colonial Office, however, ignored the petition quibbling over the technical point that Mr. Kenyatta had gone over the head of the Kenya Government in making this approach.

This was a bitter disappointment for the eager young man. He later went to Moscow and spent six months there. Re-

turning to Kenya, he was actively engaged in politics as a Kikuyu leader, though Mr. Harry Thuku, then in prison, was still regarded as the top Kikuyu leader.

Once again, on behalf of the Kikuyu Central Association, Mr. Kenyatta and two others proceeded to the U.K. in 1931. Nothing, however, was achieved and he fell into debt. He studied anthropology at London University and helped to found the Pan-African Federation, of which he was the first President. (President Kwame Nkrumah of Ghana was the Federation's General Secretary). This was the first indication of his Pan-Africanism, which has ever since been deeply embedded in Mr. Kenyatta. Living in semi-retirement in England, he published his famous book "Facing Mount Kenya" in 1938.

Once again he visited Russia, this time for four months.

During the war, he took up work as a farm labourer in Sussex, earning £4 weekly and in 1942 married the daughter of an English marine engineer. A son, Peter, was born of the marriage. He is now 18 years old and with his mother in the U.K.

After the war, Mr. Kenyatta returned to Kenya (he had been away for 15 years). He renewed his contact with the Kikuyu Central Association and called on the Governor, to whom he expressed a desire to take part in public affairs. Some have interpreted this as a wish to be nominated to the Legislative Council.

The Governor replied that since Mr. Kenyatta had been away for long from the country he should make a start in Local Government.

This somewhat reply, on top of his London experiences, probably had much to do with his determined opposition to the Government from then onwards.

In 1947, Mr. Kenyatta was elected President of the Kenya African Union, comprising all Kikuyu organisations. The following year he was re-elected President. In recalling this period in Mr. Kenyatta's chequered career, it is interesting to note the remarks made by Mr. F. D. Corfield in

his report on the Mau Mau. Mr. Corfield wrote. "He (Mr. Kenyatta) arrived back from his sojourn supremely confident of himself. He had a commanding and magnetic personality and in the inner circles of the KAU, which he dominated, he was dictatorial. As a mob orator he was without equal. His command of English was excellent and he was conversant with the modes of British thought, not excluding the great and almost fanatical respect paid to freedom in all its forms and the law."

Whatever the violent shape that the Mau Mau eventually took, it is perhaps significant that in 1950, the KAU expressed its resolve to seek its aims through non-violence and full co-operation with the Government. These aims were to unite the Africans in Kenya and secure for them equal rights with the Europeans, freedom of speech and Universal Franchise.

In October, 1952, following the outbreak of physical violence, however, the then Governor, Sir Evelyn Baring, proclaimed a state of emergency and ordered the detention of 183 people, including Mr. Kenyatta. The KAU was proscribed the following year, Mr. Kenyatta was charged with managing and being a member of the Mau Mau society and, along with the others, was tried at Kapenguria. The trial, which lasted five months, ended in the conviction of all and the imposition of the maximum sentence of seven years' imprisonment. In his sentence the magistrate recommended that the accused should be restricted after they had served their sentence.

An appeal to the Supreme Court was launched and Mr. D. N. Pritt succeeded in his argument that the trial court had no jurisdiction to hear the case. A re-trial was ordered and the convictions and the sentences were quashed.

The Crown immediately appealed against this ruling to the Court of Appeal for Eastern Africa. The appeal was upheld and it was held that the Supreme Court must carry on with the original appeal. An application by Mr. Kenyatta's counsel for permission to appeal to the Privy Council was rejected.

On January 15, 1954, the appeals of Mr. Kenyatta and four of his colleagues were dismissed while that of one other was upheld. Yet another attempt was made for special leave to appeal to the Privy Coun-

cil, but this too was refused. Two months later, the Governor signed an order subjecting the accused to restriction when their sentences expired.

Mr. Kenyatta's land was confiscated and he served his sentence at Lokitaung in the arid Northern Province. In April 1959, having earned full remission for good conduct, Mr. Kenyatta was released on licence from prison and removed to Lodwar under restriction. He remained there with his family until April this year, when he was transferred to Maralal, 200 miles from Nairobi.

This was the signal for his return to the helm of the nationalist cause. The press and political leaders were permitted to visit him and it is a pointer to the place he will undoubtedly occupy in Kenya. His utterances on these occasions were splashed in the press and re-shaped the political strategy of the two main African parties, the Kenya African Democratic Union and the Kenya African National Union. Agreement was secured between these two heated rivals at the behest of Mr. Kenyatta, who has consistently refused to align himself with either, stressing instead his desire that all Africans should unite and struggle constitutionally for freedom. He has also endorsed the idea of an East African Federation and many believe that, if this materialises, he will be its first Head of State.

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DR. S. CHANDRASEKHAR

Dr. S. Chandrasekhar, a leading world astro-physicist and Professor of Theoretical Astro-physics at Yerkes Observatory at the University of Chicago, arrived in Bombay on September 5, 1961 on a four-month visit to India at the joint invitation of the Council of Scientific and Industrial Research and the Physical Research Laboratory, Ahmedabad. During his stay in India he will deliver lectures and address science gatherings in Bombay, Ahmedabad, Calcutta, Hyderabad, Madras, Bangalore and Delhi.

Dr. Chandrasekhar had his early education at the Presidency College at Madras. He took his Doctor of Philosophy Degree from Cambridge in 1933 and joined the University of Chicago as a Research Associate of the Yerkes Observatory, Williams Bay in 1937. His distinguished service there culminated in his appointment as Professor of Astro-physics in Madras.

Fellow of the Royal Society, London and Member of the American Academy of Arts and Sciences, Dr. Chandrasekhar was the first astronomer to study the internal constitution of stars in the light of modern atomic theories. He began his career as an astro-physicist in England with R. H. Fowler and E. A. Milne and the current theory explaining super-dense stars, generally accepted by physicists and astro-physicists, was developed by him during his Fellowship period at Trinity. He is now best known for his theoretical research in the fields of stellar spectra, motions, and atmospheres.

Dr. Chandrasekhar was awarded the Gold Medal of the Royal Astronomical Society, London, the highest award in the field of Astronomy, in January, 1953. In 1957, he was awarded the American Academy of Arts and Sciences Rumford premium for his work on the radiative transfer of energy in the interior of stars.

Dr. Chandrasekhar, is the author of several eminent works including "An Introduction to the Study of Stellar Structure," "Principles of Stellar Dynamics" and "Radiative Transfer".

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SHRI B. K. NEHRU

Shri B. K. Nehru, formerly Commissioner-General for Economic Affairs, has been appointed India's Ambassador to the United States, in succession to Mr. M. C. Chagla.

Shri Nehru will bring considerable knowledge and experience in economic affairs to one of India's top diplomatic assignments.

He is not new to the United States. He was a Minister in the Indian Embassy in Washington from 1954-59. During the same period, he was also an Executive Director of the International Bank of Reconstruction and Development.

As India's Commissioner-General for Economic Affairs in Washington for the past three years, Shri Nehru succeeded to a considerable extent in making out a convincing case for large-scale and long-term foreign aid to implement the Second and Third Five-Year Plans.

Shri Nehru has been one of India's principal negotiators of all major loans and aid received by this country for the Plans.

His functioning as Ambassador in the U.S.A. should facilitate expeditious flow of the massive American economic aid to this country. Because of his special knowledge and experience, all economic matters will hereafter be looked after by the embassy itself in the U.S.A.

The Office of the Commissioner-General is now being wound up. Mr. C. S. Krishnamoorthy, Mr. B. K. Nehru's Second-in-Command, will be Minister Counsellor at the embassy.

Mr. B. K. Nehru was born in 1909. He was educated at the Allahabad and Oxford Universities.

He joined the Indian Civil Service in 1934 and was Assistant Commissioner in Punjab till 1939.

He was appointed Under-Secretary to the Government of India, Department of Education, Health and Lands, 1939; Officer on Special Duty, Reserve Bank of India, and Under-Secretary, Finance Department, 1940.

Mr. Nehru was Deputy Secretary (1944-47) and later Joint Secretary (1947-49 and 1954-57) in the Ministry of Finance. He was Executive Director, International Bank for Reconstruction and Development and Minister, Embassy of India, Washington, 1949-54.

He became Secretary, Ministry of Finance (Department of Economic Affairs) in 1957. He has been Commissioner-General for Economic Affairs with headquarters in Washington since 1958.

Of all the rewards of virtue, if we are to take any account of rewards; the most splendid is glory; for it is glory alone that can offer us the memory of posterity as a consolation for the shortness of life, so that, though absent, we are present, though dead, we live; it is by the ladder of glory only that mere men appear to rise to the heavens.

—Cicero

* * *

The very circumstance, which your suffering sense deems wrathful and afflictive, Love can make an angel entertained unawares.

—Mary Baker Eddy

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It is not every calamity that is a curse, and early adversity is often a blessing.

—James Sharp

Parliamentary Affairs

(August 7 To September 8, 1961)

The monsoon session of the Lok Sabha opened on August 7 and that of the Rajya Sabha on August 14, 1961

FINAL REPORT ON THIRD PLAN

The final report of the Planning Commission on India's Third Five-Year Plan was presented to the Parliament by the Planning Minister, Mr. Gulzarilal Nanda, on August 7.

The Rs. 10,400-crore Plan seeks to accomplish as much development in the next five years as was realized in the last ten. National income (at 1960-61 prices), which increased by Rs. 4,260 crores under the first two Plans, is expected to go up by another Rs. 4,500 crores, reaching Rs. 19,000 crores by 1965-66.

The report fixes physical targets for minimum development in the various sectors of the economy. Expenditure on the full realization of the physical targets set for the public sector is estimated to amount to Rs. 8,000 crores as against a financial outlay of Rs. 7,500 crores now being provided.

The Plan aims at self-sufficiency in food, large increases in all agricultural commodities for providing enough raw materials for domestic industry, while leaving some surpluses for export, extensive development for power and transport and a wide effort on the industrial front for establishing heavy industries, expanding the output of steel, aluminium, fertilizers and cement and promoting new industries in the electrical, chemical and pharmaceutical fields.

The per capita income, which is now Rs. 330 for a population of 438 million, will improve to Rs. 385 in 1965-66 for a population then expected to be around 492 millions.

The total foreign exchange requirements of the Plan, on an austerity basis, are estimated at Rs. 5,750 crores. After taking into account earnings from exports, external assistance to the extent of Rs. 2,600 crores will have to be secured. The carry-over of Rs. 365 crores from the authorisa-

tions of the second Plan and the assistance totalling Rs. 1,089 crores assured by the Aid India Club for the first two years gives the third Plan a good start. The balance of payments position, however, will continue to be a difficult one demanding careful watching.

Additional taxation will play a major role in financing the Plan. Increases in taxes are planned to yield Rs. 1,710 crores, as against the revenue of Rs. 1,052 crores secured by additional taxation during the second Plan. The proportion of tax revenues to national income will go up from 8.9 per cent to 11.4 per cent. The bulk of the required increase in taxation will be under indirect taxes; this is a "sacrifice" that "has to be accepted as part of the Plan" by the domestic consumer.

In the Plan, Rs. 3,725 crores are earmarked for the State plans out of the total financial provision of Rs. 7,500 crores as aggregate development expenditure in the public sector. The States will play the major role in agriculture and community development, irrigation and power, village industries and social services. The Centre will concentrate on organized industries and minerals and the development of transport and communications.

Outlaying the long-term perspective of development, the Plan looks forward to the national income rising from Rs. 19,000 crores at the end of the third Plan to about Rs. 25,000 crores at the end of the fourth and Rs. 34,000 crores at the end of the fifth. Ten years from now the nation will be producing about five times as much steel as now, 13 times as much aluminium, 20 times as much fertilizers (nitrogen content), three times as much cement, four times as much petroleum products and some Rs. 1,600 crores worth of output from its machine-building facilities.

The programme for free and compulsory primary education will cover 76.4 per cent

of the children in the 6-11 age group. The total number of students in schools will go up from 43.5 million to 63.9 million.

The various programmes of development included in the Plan will, it is hoped, provide new employment opportunities for 14 million people. Additional employment in agriculture is estimated at 3.5 million jobs and in non-agricultural occupations at 10.5 million.

MR. NEHRU'S STATEMENT ON PLAN

Prime Minister Nehru told the Lok Sabha on August 21 that the third five year Plan should be treated not as a party affair but as a national plan. He said that the two social objectives in planning were a rapid expansion of technological and scientific progress and the derivation of social justice and equal opportunity. It was necessary therefore to have a long perspective in planning. He announced that the Planning Commission was preparing a perspective plan for 15 years which would target for 1975-76, a national income between Rs 33,000 crores and Rs 34,000 crores and a per capita income of Rs 530.

Mr. Nehru referred to the 'remarkable progress made by the Defence Department particularly its industrial apparatus which not only produced arms and ammunitions but a variety of other goods required by a modern army. He specifically mentioned the increase of vehicle-making capacity of defence production and said India would soon be manufacturing transport aircraft.

While stating that India was fortunate in getting considerable external assistance for the Plan, Mr. Nehru once again refuted the Pakistani contention that foreign aid released India's domestic resources for the purchase of arms. Mr. Nehru pointed out that external aid was earmarked for particular projects which also require internal resources for their implementation. There was no leftover.

He underlined the need to increase exports, and warned that this would have to be done in spite of the difficulties in this regard that would follow the United Kingdom's entry into the European Common Market.

Mr. Nehru said scientists had to be given a better deal. It was a tradition from British days that only administrative personnel were considered the elite. But in

the present context, scientists were just as important as administrators.

Referring to administrative problems in relation to the need to complete the Plan, Mr. Nehru suggested that all work had to be 'task-oriented'. Administration should not be undertaken as a day-to-day job but linked to the objective set before it. In this context, he praised the head of the Atomic Energy Department who had cut down cumbersome bureaucratic procedure so that the right man was picked for a job and given freedom to act. In doing so, risks would have to be taken and perhaps losses suffered, he said.

MR. GULZARILAL NANDA'S STATEMENT ON PLAN

Winding up the three-day debate on the Third Plan in the Lok Sabha the Union Minister for Planning, Mr. Gulzarilal Nanda, on August 24 stoutly defended the attention paid to heavy industries in the Third Plan and said that the strategy embodied in the Plan was the correct strategy.

Mr. Nanda said that if the country did not lay strong foundations now for producing the capital goods required by various industries it would neither be in a position to advance economically in the next 10 to 15 years nor would it be in a position to pay for all the machinery required.

If India were to import all the machines and not fabricate them here as advocated by the Plan, the consequences would be disastrous as it would have to export everything it produced leaving very little for its people.

Declaring that implementation was the major key to the success of the third Plan which would lay firm foundations for a self-reliant and self-sustaining economy, Mr. Nanda said the Planning Commission had taken a series of steps to remove the bottlenecks experienced in the implementation of the second Plan.

There would be well-equipped technical planning cells in the ministries concerned—the design and research units would be strengthened, adequate arrangements would be made within the Ministry of Finance for examining the cost estimates of projects and for ensuring effective co-ordination between various sectors for securing fulfilment of targets and time schedules; advanced planning and accurate estimate of

costs would be instituted and special units would be set up in each project for assisting the management to raise productivity.

Describing the financial limits and the physical planning provided for in the third Plan as a better technique in planning, Mr. Nanda said the Government wanted to do more. But the resources in sight were not quite adequate. The commission felt that the proper thing to do was to have some projects in the Plan and, as resources became available, to implement them.

Mr. Nanda said that a charge had been made that the Plan had taken for granted that there was going to be a big increase in prices. It had not done so, he added. There might be in the course of next five years relative fluctuations in prices, but the Plan did not contemplate any appreciable rise in the prices of essential goods. The price-rise during the last ten years was not higher than in any other country.

Mr. Nanda said that one of the reasons for the excessive rise in prices in the second Plan was deficit financing which was out of proportion. In the third Plan deficit financing was to be kept within the limit which was non-inflationary.

Mr. Nanda said indirect taxes during the last 10 years had been responsible for an annual rate of price increase of half a per cent. More important than indirect taxes was the problem of evasion of taxes.

The Lok Sabha approved the Plan and its objectives, priorities and programmes by voting in favour of a motion tabled by Mr. C. R. Narasimhan (Congress). The motion, which was carried by a voice vote, also called upon the people to carry out the Plan with determination.

The Third Five-Year Plan got the approval of the Parliament with the adoption by the Rajya Sabha on August 31 of a motion accepting its objectives, priorities and programme.

DEBATE ON BACKWARD CLASSES

The Lok Sabha held a two-day debate, on August 8-9, on the report of the Commissioner for Scheduled Castes and Tribes for 1959-60.

Opening the debate Deputy Home Minister Violet Alva claimed that there had been sufficient progress in the economic uplift of the Scheduled Caste and other backward communities.

Mrs. Alva said about Rs. 106 crores had been allotted in the third Plan for the uplift of the under-privileged classes. Of this, Rs. 79 crores were to be spent by the States and Rs. 27 crores by the Centre. The physical programme in the Central sector, however, had been put at Rs. 35 crores, and she hoped this target would be achieved.

Mrs. Alva pointed out that the Scheduled Castes had been doing better from year to year, although the Scheduled Tribes still had much leeway to make up. It would be difficult to put an end to untouchability unless the socio-economic conditions of the under-privileged were raised.

She said 300 tribal blocks would come into existence by the end of the third Plan. The tribal Commission had finished its work. Its report would enable the Government to know what further steps were necessary.

The Deputy Minister said scavenging had become a respectable occupation in all the advanced countries. There was no reason why it should not be so in India. The time had come when the social stigma attached to scavenging must go. A committee had already been set up to suggest better methods of scavenging.

Replying to the debate on August 9, Mrs. Violet Alva stressed the need for the utmost vigilance to prevent anti-national activity in the garb of religion.

Mrs. Alva referred to the complaints of mass conversion of people from one religion to another under coercion and said if specific cases were brought to the Government's notice, they would certainly be examined and the necessary steps taken.

Under the Constitution, she said, change of religion was permissible, but no coercion ought to be allowed. It was wrong for the leader of any religious group to take advantage of poverty for purposes of conversion.

Mrs. Alva said the question of scavenging should be tackled on a war footing. The committee had made several suggestions for improving the methods of scavenging. The report would soon be sent to all the States. It was for the municipalities and local bodies to implement the suggestions. She congratulated the Punjab Government on having taken the lead in appointing a committee to introduce a more dignified way of scavenging. She favoured a member's

suggestion for dropping the word Harijan in view of the changing situation.

DISCUSSION ON SUGAR EXPORTS

The Lok Sabha held a three-day discussion on the measures to step up sugar exports, on August 8 to 10. On August 8, the Deputy Food Minister, Mr. A. M. Thomas, informed the Lok Sabha that it was proposed to export before December 1.87 lakh tons of sugar to the United States and 30,000 tons to other countries, largely the Federation of Malayan States. This would bring in foreign exchange worth Rs. 12 crores.

Mr. Thomas said the Government would have to incur a loss of Rs. 5.5 crores as a result of these exports due to difference in the prices in India and the world market. The exports were being canalised through the Indian Sugar Mills' Association.

It was not possible, he added, to fix the export prices as this depended on the prices and conditions prevailing in the U.S. and world market at the time of sale.

Sugar production during 1960-61 was estimated at 29.8 lakh tons. The surplus at the end of the year after providing for normal carry-over and exports would be 6 to 7 lakh tons.

Explaining the measures taken by the Government to reduce the cost of production and increase exports, in view of the present sugar crisis caused by surplus production, the Minister for Food and Agriculture, Mr. S. K. Patil, said that in view of India's decision to join the International Sugar Agreement it was not free to sell sugar to countries outside this agreement. The export quota of 2.25 lakh tons had been given to India by the United States on the basis that this country must join the agreement. There would now be an additional member 2 lakh tons to be exported to other said, was for the agreement. Pakistan, he that the prices of sugar had gone up due to the protection policy.

About the distribution of sugar, Mr. Patil said it was the responsibility of the States. Over two lakh tons of sugar were issued to the States every month by the Centre. The States were being advised to liberalize the procedure for their distribution so that the existing bottlenecks were removed.

At the end of the discussion on August 10, Mr. S. K. Patil said that the Government had no intention whatever at present of reducing the price of sugar cane. But he hinted that the Government might devise a formula some time in the future to ease the problem of sugar surplus. Farmers might have to make a choice, he said.

Mr. Patil disclosed that the Government was seriously considering whether they should not use the Essential Commodities Act in order to regulate cash crop production, so that there was not greater diversification to the cultivation of sugarcane. If this was not done, there would be severe imbalances in the agricultural economy.

Mr. Patil said the area under sugarcane production had gone up from 52 lakh acres in 1959-60 to 61 lakh acres in 1960-61.

It was necessary to export half a million long tons of sugar annually, Mr. Patil said. This was only five to six per cent of the total production. He explained that in every country export prices were considerably less than domestic prices.

There would be great benefit from earning foreign exchange. India's sugar export to the United States was expected to yield \$60 million, but this would service and amortize \$600 million of loan.

Mr. Patil had told a group of Congress M.P.s on August 9 that while Government would safeguard the interests of the cane-growers, the latter should also be prepared to help in the Government's efforts to bring down the cost of sugar production.

Mr. Patil pointed out that a big diversion from wheat and other food crops to sugarcane had taken place in recent years, particularly in U.P. as a result of the incentive given to the cane-growers. Instead of extending the acreage under sugarcane, there was need to increase the yield per acre. Unless the cost of sugar production was brought down they could not hope to export substantial quantities of sugar.

MR. DESAI ON FOREIGN EXCHANGE SITUATION

Making a statement on the foreign exchange situation in Lok Sabha on August 9, the finance Minister, Mr. Morarji Desai, expressed gratitude to the Aid India Club for promising financial assistance of the value of Rs. 1,100 crores, but he warned the country of the serious balance of payments

position and emphasized the need for larger exports. However he was now confident, he said, that the requirement of external aid set out in the third Plan would be forthcoming.

In the beginning of the financial year there had been a "substantial drop" in foreign exchange reserves. Part of this had been covered through loans from the United Kingdom and West Germany.

Seasonal factors bearing on export earnings, pushed down the sterling balances almost every year in the summer and monsoon months. Although it was possible to withstand such fluctuations if the balances were high, at the beginning of the current financial year they stood at only Rs. 136 crores. It was necessary to ensure that the balances were somewhere around Rs. 200 crores during the winter months, so that the seasonal decline did not prove embarrassing.

This, however, was not the only factor for the decline. The level of imports had been steadily rising. This was inevitable to some extent as the import bill on account of raw materials would go up with the greater pace of industrialization. But whereas in other countries, the volume of exports rose steadily, in an under-developed country like India increased production got absorbed in increased domestic consumption.

The second factor was that a mass of imports, like capital goods which could not be bought for the second Plan, and raw materials and essential components required for producing plant and machinery and other capital goods in India, as well as items like fertilizers, had to be paid for by India. Foreign aid was not available for financing those imports.

Mr. Desai, however, said countries like the U.S., U.K., West Germany and Canada were recognizing the importance of aid of a more flexible nature and were already making available aid which was not tied to capital products.

The third factor was the accumulation of repayment liabilities at the beginning of the third Plan period. This was because a lot of short-term credits were used for the second Plan. Moreover, with the dwindling of the foreign reserves, interest had also fallen.

"It will clearly not be possible to en-

tertain any short-term debts now, and the kind of deferred payment arrangements which were being approved during the second Plan will simply have no place in the third Plan." Mr. Desai said.

Outlining long-term measures to meet the situation, the Finance Minister said that exercising a member's right \$250 million in various currencies had already been withdrawn from the International Monetary Fund to increase India's foreign resources.

In doing so, it had been necessary to repay the IMF an earlier debt of \$125.7 million leaving \$122.5 million, as the net addition to India's reserves which now stood at Rs. 153 crores.

Turning to the long-term problem of finding foreign exchange for the third Plan, he pointed out that exclusive of supplies under PL 480, India's requirements had been placed at Rs. 2,600 crores. The rest of the foreign exchange content of the Plan had to be financed out of India's own resources, which meant primarily export earnings.

Taking the aid carried forward and the aid committed by countries like the USSR, Czechoslovakia, Yugoslavia, Poland and Switzerland, the total external aid available for the third Plan was of the order of Rs. 673 crores in April this year. Taking into account the agreements signed with U.K. and W. Germany early this year before the meeting of the consortium, the figure came to Rs. 765 crores.

Mr. Desai said that a favourable feature of the consortium meeting was the recognition of the fact that development like that in India could not be financed by short-term loans carrying commercial rates of interest. Loans from the International Development Association will now be for 50 years, interest-free and with an initial moratorium of ten years. He expected that money from the U.S. would be advanced on similar terms. The U.K. had agreed to increase its period of lending from 15 and 20 years to 25 years with a seven-year moratorium. West Germany had agreed to three per cent interest on part of the loans to be made to India.

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DADRA, NAGAR HAVELI INTEGRATED WITH INDIA

The Deputy Minister for External affairs, Mrs. Lakshmi Menon, introduced in

the Lok Sabha on August 11, a Bill to amend the Constitution to provide for the integration of Dadra and Nagar Haveli with the Union of India. It was proposed to specify these areas expressly as the Union Territory of Dadra and Nagar Haveli by amending the First Schedule. It was further proposed to amend Clause (1) of Article 240 of the Constitution to include therein the Union Territory of Dadra and Nagar Haveli.

Mrs. Menon also introduced another Bill to make provision for the representation of the Union Territory in Parliament and for its administration.

According to the financial memorandum, with their integration, these areas were also to be brought within the scope of the development plan of the Union; the anticipated surplus would be used for the special development scheme for these areas supplemented, if necessary by an additional amount from the Consolidated Fund of India.

Over the past two years the administration of Dadra and Nagar Haveli had accumulated surpluses amounting to Rs. 30 lakhs. On the integration of these areas with the Indian Union these surpluses will accrue to the CFI.

The Lok Sabha on August 14 unanimously passed, by 343 votes against none, the Constitutional (Tenth Amendment) Bill incorporating Dadra and Nagar Haveli into the Indian Union.

The Vice-President gave his assent to the Constitution (Tenth Amendment) Bill on August 17.

The Lok Sabha passed unanimously on August 17, the official bill to make provision for the representation of the Union Territory of Dadra and Nagar Haveli in Parliament and also for its administration.

The Union Territory, which has a population of 50,000, will have one representative in the Lok Sabha, to be nominated by the President. The Bill, among other things, provides for the extension of jurisdiction of the Bombay High Court to the new territory. The Varishta Panchayat, which had been administering the area before its integration into the Indian Union, is being given an advisory status and will have the right to make recommendations to the administrator.

Following the integration of Dadra and

Nagar Haveli with the Indian Union, the President will soon nominate a leader of the liberated Portuguese possessions as a member of the Lok Sabha.

The people of Dadra and Nagar Haveli will not be participating in the general elections of 1962. As is the case with Jammu and Kashmir State, the Andaman and Nicobar Islands and Part B tribal areas, a nominated member will continue to represent Dadra and Nagar Haveli in the Lok Sabha, according to present intentions.

The Government of India has appointed Mr. K. G. Badlani as administrator of the new Union Territory.

Initiating the debate on the Enclaves Merger Bill in the Rajya Sabha on August 16, the Union Law Minister, Mr. Ashoke Sen, said he had no doubt that with the passage of the Bill, the hollow claims of Portugal that parts of Indian territory belonged to Portugal would not only be exposed but completely destroyed soon.

Speaking after a two-hour discussion on the Bill which had been moved by Law Minister Ashoke Sen on his behalf, Prime Minister Nehru said he wanted to associate himself in a historic moment when "a little piece of territory is coming back to the arms of mother India."

He could well understand the frustration in the minds of many about the Goa problem, but he was convinced the policy adopted so far had been the right one. If it was a question of sending the army into Goa, everyone including Portuguese Premier Salazar knew that the Portuguese Army could not resist for more than an hour or a day at the most. India's policy had been opposed to waging war, however small it might be.

He referred to Portugal's links with NATO and the reactions an armed action might produce in the United Nations. Also, whatever might be done from outside, the initiative must come from the people of Goa.

At the end of the debate, the Rajya Sabha adopted the Bill with acclamation.

On August 23, the Rajya Sabha passed the Dadra and Nagar Haveli Bill to provide for their representation in Parliament and for the administration of that territory.

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PROGRESS ON OIL DRILLING
The Union Minister of Mines and Oil

Mr. K. D. Malaviya, informed the Lok Sabha on August 14, that negotiations with ENI, an Italian oil firm for collaboration in the development of oil industry in India had practically concluded, and a Government decision would be announced soon.

The Minister gave the following progress report about oil drilling in various parts of the country.

Assam: 1. One hundred and three wells have been drilled in Nahorkatiya, Hugrijan and Moran areas of the Oil India Limited, so far, of which 72 are oil-producing, eight give only gas and 12 are dry. The results of 11 wells are awaited.

2. Two deep wells have been drilled by the Oil and Natural Gas Commission, one in Sibsagar, and another in Rudrasagar. Oil has been struck in the Rudrasagar well. Drilling of one more well in Rudrasagar is in progress.

Gujarat: 1. In Cambay 17 wells have been drilled so far by the commission, of which 11 have produced oil, three gas and two are dry. One well was drilled purely to obtain stratigraphic information.

2. Fifteen wells have been drilled in Ankleshwar, out of which 13 are oil-producing and two are dry.

3. One well has been drilled at Kalol and oil has been struck there.

Punjab: Three deep wells have been drilled in Punjab, of which two were drilled at Jawalamukhi. Only gas was found at shallow horizons in Jawalamukhi Well No. 1. The second well was dry. One well was drilled at Hoshiarpur, where no oil/gas was found. One well is being drilled at Januari, Hoshiarpur.

According to Messrs de Goyled MacNaughton, the consultants of Oil India Limited, the reserves of crude in Nahorkatiya, Hugrijan and Moran in Assam were estimated at 44,830 million tons on Jan. 1. This assessment was based on the results of the 88 wells drilled, of which 59 were oil-producing, seven gas-producing and 12 dry. Ten wells are awaiting tests.

The commission has estimated that about 50 tons a day from Cambay and 1,000 tons a day from Ankleshwar oilfields can be produced now. This will be stepped up to 1,500 tons a day in a short period after that. To have this oil refined in the Trombay refineries; it is planned to develop the Ankleshwar field to a capacity of two mil-

lion tons a year by the time the Gujarat refinery goes into operation. As only one well each has been drilled at Rudrasagar and Kalol, it is not possible to assess the available reserves of crude oil from these fields unless several wells have been drilled in these fields.

The Scheme to lay a network of pipelines in the country to transport refined petroleum products was still under consideration. An offer has been received from ENI to cover the foreign exchange requirements of two pipelines and otherwise collaborate in their execution.

Nearly Rs. 18.5 crores were spent up to the end of July 1961 on the Nahorkatiya-Barauni pipeline.

The first stage of the pipeline from Nahorkatiya to Nunmati was expected to be completed by the end of this year and the second stage from Nunmati Barauni during October-December, 1962.

* * * FOREIGN AFFAIRS DEBATE IN LOK SABHA

Initiating the debate on foreign affairs in the Lok Sabha on August 16, Prime Minister Nehru said that if access to West Berlin was assured, one immediate source of fear and tension in international affairs would disappear. The geographical fact of the existence of two Germanies had, however, to be recognized.

Mr. Nehru said the world was facing a serious situation. There was a "definite drift" towards war. Disarmament was the only way to peace but disarmament which had seemed near at one time was now "a far-off dream." In fact, the reverse process was taking place.

On matters immediately concerning India the Prime Minister presented a gloomy picture. The talks which the Secretary-General of the External Affairs Ministry, Mr. R. K. Nehru, had had with Chinese leaders had not produced any good results, and the position remained "static."

He did not visualise any improvement in relations with Pakistan until Pakistan gave up its obsessive fear, hatred and envy of India. He was convinced that Indo-Pak relations were not dependent on Kashmir. If the Kashmir question was removed, Pakistan would find some other pretext for continuing its anti-India policy. Mr. Nehru hinted that yet another problem was brew-

ing over the Farrakah Barrage scheme intended to save the port of Calcutta. Pakistan had already started a campaign that the scheme had been devised to starve millions in East Pakistan.

The Prime Minister obliquely indicated that India might recognize the Provisional Government of Algeria when he said that there was already de facto recognition and that there was no high principle involved except that India had felt that non-recognition might have helped India in dealing with the problem. If it did not, Government was prepared to reconsider the matters.

He said settlement of the Algerian question had become complicated because of the discovery of oil in the Sahara.

Mr. Nehru condemned Portuguese suppression of the Angolan people in the strongest terms. Something "very horrible" was happening there but he was sure that it would not be easy to suppress the people of Angola. He criticized the support given to Portugal by NATO whose arms were being used in Angola. He specially referred in disparagement to the United Kingdom for supporting her "oldest ally."

Winding up the debate in Lok Sabha on August 17, Mr. Nehru justified the visit of the Secretary-General of the External Affairs Ministry to Peking, saying that such exchanges were necessary so long as diplomatic relations existed between India and China.

He declared that while the pressure on India arose out of Chinese occupation of Indian territory, China was under pressure because of its loss of prestige in the world in general and in Asia and Africa in particular.

While refuting President Ayub Khan's charge that India had recently bought military equipment from the United States, Mr. Nehru contradicted a statement reported to have been recently made by Mr. Chester Bowles, U.S. Under-Secretary of State, that U.S. military aid was committed to the defence of both India and Pakistan in case either country attacked the other. Mr. Nehru said that whatever commitment the U.S. had with Pakistan, "there is no commitment to us in regard to aid of this type." The subject had not been discussed at all.

Referring to the criticism that India was neglecting diplomatically Africa and Southeast Asia, he said that India's relations

were very good with African countries. These nations were full of vitality and vigour and perhaps that was why sometimes they took actions which India did not approve. Friendship, however, did not mean taking directions.

He agreed that diplomatic representation with these countries was now strictly limited but the Government was presently taking steps to appoint an ambassador in Senegal who will concurrently represent India in the Ivory Coast, Upper Volta and Niger. Other Indian diplomats at present in Africa would extend their representation to cover Chad, the Central African Federation, Gabon, Sierra Leone, Mali, Guinea, Gambia, Cameroons, Dahomey and Somalia.

Prime Minister Nehru flatly declared that he could not rule out the use of arms in regard to Goa. Mr. Nehru said that if he was asked to give an assurance that arms would never be used in regard to Goa he would not be able to give it. A time may come when the House would demand that arms be used to free Goa, "We will then do it," he announced.

The Lok Sabha gave its approval of the Governments foreign policy at the end of two-day debate.

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FOREIGN AFFAIRS DEBATE IN RAJYA SABHA

Opening a debate on foreign affairs in Rajya Sabha on August 22, Prime Minister Nehru sternly rebuked the Communist Party for speaking with two voices on the Sino-Indian border dispute. The subject, he said, did not allow for equivocation.

Mr. Nehru charged a section of the party with conducting propaganda in justification of China and characterizing India's stand as a "game" to win the elections. He described this attitude as "anti-national."

It may not be very important what the Communist Party said inside this country, Mr. Nehru remarked, but it could give a wrong impression to "the other side."

Mr. Nehru pointedly remarked that if anyone in Pakistan thought he could bully India by making complaints in other countries, he did not understand what India stood for and how India reacted.

He could not understand how Pakistan could continuously harp on Kashmir when it was they who had allowed raiders into Kashmir and had followed that up by send-

ing regular troops and had not got out of the area they occupied.

On the German question, Mr. Nehru said India did not want to take sides. But there was no use in shutting one's eyes to the geographical fact of two Germanies. He said in this connection that there was not the slightest chance of the Oder-Niesse line separating Poland from East Germany being changed except by war.

Replying to the debate on foreign policy on August 23, Prime Minister Nehru announced in the Rajya Sabha that Indian defence scientists had been experimenting with success on the development of air-to-air guided missiles. He said the country was well prepared to meet any situation and it need not be unduly alarmed over the U.S. supply of arms to Pakistan.

Referring to the free movement between East and West Berlin, Mr. Nehru referred to a number of protocols and agreements to make the point that the original four-Power joint occupation and administration of Berlin had been modified by the June 1949 statement of the Big-Four Foreign Ministers.

While the statement of the Foreign Ministers referred to the continuance of freedom of movement between East and West Berlin, they did not invoke any right of access.

Mr. Nehru pointed out that while the Western presence in Berlin was based on the protocol of Sept. 12, 1944, there was no automatic right of access to Berlin. The right of access was secured by Western Powers by verbal agreement in June 1945, not as a right but as a concession by Soviet authorities.

Referring to the question of recognition of East Germany, Mr. Nehru said that India's recognition of West Germany was really a continuation of their wartime status. In the case of East Germany they had had no such continuing factor.

He was sure India would never be an aggressive country in the military sense. "We have no ambitions in regard to territory except to recover what is ours, except to gain one bit of territory which is not yet ours, Goa, and thus complete the freedom of this country. Outside that we have no ambitions."

After the debate the Rajya Sabha approved the Government's foreign policy.

PUNJAB SITUATION DISCUSSED IN PARLIAMENT

Making a statement on the Punjab situation in the Lok Sabha on August 28, the Prime Minister, Shri Nehru made an earnest appeal to Master Tara Singh to give up his fast. He reiterated that he was unable to agree to the proposal for a partition of the State because it seemed to him harmful both in principle and in its application. Shri Nehru said any such demand based on coercion exercised by a fast appeared to be an undesirable and harmful method opposed to the normal concepts of democracy and parliamentary procedure.

Shri Nehru referred to his talks with Sant Fateh Singh. He said it was suggested by Sant Fateh Singh that regional committees in the State should be given powers of legislation and converted into some kind of sub-legislatures. He was wholly unable to agree to this as it was not only not in keeping with our Constitution, but would produce an extraordinary State of affairs in the Punjab with three legislatures functioning there. Shri Nehru said that the charge that the regional formula in Punjab had not worked and was practically dead was not correct. He was, however, fully prepared to have this matter examined by representatives of the regions and the Punjab Government so that the working of the formula could be improved and made more effective. If it was thought necessary some additional powers could be given to the regional committee. About the charge of discrimination against the Sikhs, he had suggested that if there was any such apprehension a high level enquiry could be made into the matter. Shri Nehru said as far as Punjabi language was concerned full opportunities had been provided for the growth of the language and full protection had been given to Punjabi. Therefore, the question of demanding a Punjabi-Suba to give facilities to the Punjabi language did not arise. The demand for a Punjabi-Suba thus could only be considered as a communal demand even though it was given a linguistic base.

The Prime Minister said that he had pleaded with Sant Fateh Singh that the proposal to partition Punjab was harmful for various reasons. The Punjab is one of the most prosperous States with the highest per capita income in the country. It is an economic unit and to break it up would

necessarily injure its developing economy specially at this time when the Third Five Years Plan has just begun. Apart from the economic aspect, Punjab formed a definite social and linguistic unit with Punjabi as the dominant language. There are innumerable families with both Hindus and Sikhs as their members. In fact, Punjab has been a more integrated State than almost any other State in the country and to break this integration would be a tragedy. Shri Nehru said the argument that linguistic provinces had been accepted elsewhere but not in Punjab was not valid.

Shri Nehru said he pleaded with Sant Fateh Singh to induce Master Tara Singh to end his fast because wrong means could not lead to right results. He pointed out to him that the future of the State will be dark if there was conflict and tension between Hindus and the Sikhs. Mutual goodwill and co-operation were necessary in the State's progress and any further partition would inevitably create a great deal of illwill and conflict.

Shri Nehru's statement was read out in the Rajya Sabha by the Home Minister, Shri Lal Bahadur Shastri.

Replying to the debate on the situation in Punjab on August 29, the Prime Minister said that Government's policy regarding Punjabi is not only a firm policy but a right policy and any marked deviation from it would be injurious not only for Punjab but the whole country. Shri Nehru said he could not see any possibility in the near future which will make the Government change its decision not to accede to the demand for a Punjabi Suba. Shri Nehru said the demand had been intimately before them for the last one year and he had come to this decision after careful consideration with his colleagues. They had taken into account the possible consequences of any step that they might take. Shri Nehru said he had pleaded with Master Tara Singh earnestly and would continue to do so, to give up his fast. But pleading did not mean giving up something which he considered vital. The Prime Minister said that with all his desire to be flexible, he had not been able to reconcile himself to the idea of tearing up the finely-woven garment which was Punjab today. He said linguistically, culturally and socially Punjab had developed as an integrated unit and there were a certain Punjabiness about

its people whether they were Hindus, Muslims or Sikhs.

Replying to the debate in the Rajya Sabha on the Punjab Situation on August 30, the Prime Minister said he hoped that the strong opinions expressed in both Houses of Parliament against the demand for a Punjabi Suba, would carry some weight with Master Tara Singh and he would give up his fast. He said the consequences of agreeing to the demand would be far graver and more far reaching than the effects of not agreeing to it. Government had come to the firm conclusion therefore, that they could not accept the demand even in principle. Giving effect to the demand would be no protection to Punjabi language. In fact it would harm it by limiting it to a small area. There would be a dangerous division of Punjab on communal lines leading to the growth of fissiparous tendencies and bitterness. The State would suffer economically and the pattern of development over a long period would be torn to shreds. Shri Nehru declared that Government could not therefore compromise on a matter, the consequences of which would be serious.

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FACTS AND FIGURES

Indian Firms in Pak: The Pakistan had taken over some Indian commercial firms in Pakistan without paying compensation for them.

A number of cases where Indian firms had been facing difficulties in remitting the profits earned by them in Pakistan to India had also come to the notice of the Government. As Pakistan is under martial law, it precludes any normal legal remedies.

Naga Hostiles Quieter: There has been some diminution in the number of incidents involving activities by Naga hostiles since the establishment of Nagaland.

The number of incidents have gone down by about 33 per cent compared to the period August 1960-February 1961.

Food Grain Production: On a rough basis, the production of foodgrains in 1960-61 may fall short of the current year's requirements by only two to three million tons. This can be easily made good from existing government stocks.

There had been a record production of wheat and rice in India. The production of rice in 1960-61 was 33.7 million tons as

against 30.9 million tons in the previous year. The corresponding figures for wheat production are 10.6 million tons and 10 million tons.

The biggest producer of rice was West Bengal, whose production had markedly gone up this year. Bihar, Madras, Madhya Pradesh and Uttar Pradesh has also registered substantial increases.

Uttar Pradesh produced the largest quantity of wheat and also showed increased production this year. So did the Punjab. Among the non-wheat eating areas, Assam produced more. Madhya Pradesh, Rajasthan, Gujarat and Kashmir recorded marked falls. Other States showed little change.

Loan for Calcutta Port: The International Bank for Reconstruction and Development has agreed to grant a loan in various foreign currencies amounting to Rs. 10 crores for the development of Calcutta Port.

The Bank had agreed to grant a loan in various currencies equivalent to 21 million to the Calcutta Port Commissioners.

The loan will be for a period of 25 years, including five years grace period. A commitment charge to the rate of $\frac{3}{4}$ per cent will be payable with effect from 60 days after the date of agreement.

Cost of Beas Project: The site selected for the Beas is near Pong village in Kangra district, about five miles from Talwara and 24 miles from Mukerian railway station on the Jullundur-Pathankot section.

The total estimated cost of the dam and appurtenant work is Rs. 94 crores. The entire cost will be advanced as an interest bearing loan by the Central Government.

Indian Citizenship for Chinese: The number of Chinese nationals who had applied for Indian citizenship under the provisions of the Citizenship Act, 1955, was 142, out of which only 15 had been accepted as Indian citizens by naturalization and five by registration—the latter being Chinese women married to Indian citizens.

Kiriburu Mines: The Kiriburu mines in Orissa expect to start producing iron ore during 1963. The National Mineral Development Corporation, is developing the Kiriburu mines.

Working of Indus Waters Treaty: India has paid to Pakistan the first instalment of Rs. 2.8 crores due under the treaty. There

is no information whether Pakistan has started the construction of link canals.

The Indus Water Commission has met thrice so far and had submitted its first annual report to the two Governments on May 31.

Second mechanized Farm: A second mechanized farm on the lines of the Suratgarh farm is proposed to be set up at Jetsar in Rajasthan.

Rajasthan has been chosen for the second farm also because to acquire about 30,000 acres of irrigated land elsewhere will mean eviction of about 20,000 people. In the case of Rajasthan, enough fallow land is available.

Replacement of Foreign Technicians: The foreign technical personnel in the State-owned steel mills will be replaced by Indian Staff within two years. The Government's general policy is to relieve foreign technicians as soon as possible.

The Hindustan Steel Limited had introduced a training scheme to strengthen their executive talent. Fresh candidates will be recruited on the basis of competitive examinations as graduate apprentices (non-technical) and will be trained in management. In addition, facilities offered by the various institutes in India as well as abroad in refresher courses are being utilized by the Hindustan Steel.

Contact Dermatitis: Preliminary findings have revealed that Contact-Dermatitis caused by the use of nylon may be due to the dye-stuffs used rather than the fabric itself.

Research on the subject is being conducted by the Honorary Dermatologist of Irwin Hospital, New Delhi, and is "still in progress".

It had also been found, that there is greater danger of the disease in hot countries and less in cold climates.

No Ban on 'Lolita': The Government "do not consider it necessary" to place any ban on circulation and sale of the novel 'Lolita'.

Leaflets from Air: It is permissible under the Indian Aircraft Rules, 1937, to drop from the air separate sheets of paper containing printed matter in any place if the written permission of the district magistrate or, in a presidency town, of the commissioner of police is first obtained in each case.

Science Museums: Science Museums will be set up at Calcutta and Bombay in addition to Delhi.

Technology Institute: The Union Government has accepted the Thacker Committee's recommendation that an institute for machine tool technology and design should be established at Bangalore as an autonomous organization.

Pakistani Aircraft Violations: The Pakistani aircraft has violated the Indian air space 14 times during the first seven months of this year. There were 16 air violations by Pakistan during the corresponding period last year.

Punjab's Land Gift: The Punjab Government has agreed to give 600 acres of land as a gift for the third unit of the Hindustan Machine Tools at Pinjaur near Chandigarh.

Space Research in India: Some analysis has been initiated by Indian scientists on space data supplied by the Soviet Union and the United States and important conclusions have been reached concerning density and temperature of the high atmosphere. The Soviet Union and the U.S. had made available space data collected by them to the world science community through "Cospar", the special international committee on space research.

No separate committee has been appointed by the Government for space work, but the Indian national committee of the International Geophysical Year has been asked to function provisionally as the national space committee for India.

Survey of Diamond Region: The Geological Survey of India proposes to undertake large-scale mapping with pitting, trenching, drilling, sampling and washing for diamonds in Kurnool, Mehboobgarh, Nalgonda, Guntur, Krishna and Anantapur districts during the third Plan period.

Indian Investment Centre: A branch office of the Indian investment Centre will be opened in New York and later in the United Kingdom, Europe and Japan.

The functions of the centre include promotion of wider knowledge and understanding about Indian conditions and opportunities in the capital exporting centres of the world and to advise and assist foreign businessmen on matters relating to investment in India.

Bifurcation of Wards: The Election Commission has decided to bifurcate all two-member constituencies, and final notifications directing amendments to be made in the delimitation order for giving effect to this decision has also been published in respect of Assam, Gujarat, Madras, Maharashtra, Mysore, Orissa, Panjab, West Bengal and the Union Territory of Delhi.

Gujarat Refinery: On the recommendations of the site selection committee and the Oil and Natural Gas Commission, the Union Government has approved Koyali, Baroda district, as the site for the proposed Gujarat Oil Refinery. Samples of the crude oil to be processed by the refinery have been sent to the U.S.S.R. for research and analysis in order to determine the design data for the refinery as well as the product yields.

Machinery Plant: The Union Government has approved and issued the necessary licences for the setting up of a plant for the manufacture of pulp and paper mill machinery in Madras State. It would be set up by a private Indian company with U.S. collaboration.

Hindustan Shipyard: The cost of construction of ships at the Hindustan Shipyard compares favourably with that of ships manufactured in foreign countries. So far as the question of parity in the cost of ships is concerned, India is equal to France and Italy and "very much better" than the United States, but the cost in Britain is lower than in India.

Pak Claims River: Pakistan is claiming the whole of the Feni river as its own against all international conventions and preventing work on construction of an embankment to save Sabroom town (Tripura) from erosion.

Gir Lions: The number of lions in the Gir Forest is increasing, according to the censuses carried out in 1950 and 1955. In 1950 there were 219 lions and in 1955 the number was 290.

Training: The U.N. Special Fund has agreed to help India in setting up the Central Instructor Training Institute at Madras. The U.N. funds contribution towards the project will be about 612,000 dollars. The Central Industrial Extension Training in Hyderabad is expected to start functioning from January, 1962.

Engineering Colleges: Ten Engineering Colleges and 67 Polytechnics are proposed.

to be established during the Third Plan under the State Plans. The Central Plan provides for a college in Delhi and 8 Regional Colleges including one college sanctioned in the Second Plan but not started. The Regional colleges are proposed to be started this year for which necessary preparations are in progress.

Punjab Project: It has been decided to set up a machine tool factory with an annual production of 1,000 machine tools at Pinjore in Punjab. Preliminary work connected with the setting up of the factory would be undertaken during the current year.

State Trading Corporation: Exports by the State Trading Corporation during 1960-61 amounted to nearly Rs. 37 crores. This was nearly Rs. 13 crores more than compared to the figures for the year 1959-60.

Nagas Killed: Fifty-one encounters took place between the armed forces and hostile Nagas during the period May 1 to July 31, 1961; 49 hostiles and five security personnel were killed in the encounters.

Netaji's biography: The writer of Netaji Subhash Chandra Bose's biography was not allowed by the United Kingdom authorities to see some of the original letters in their possession.

The U.K. Government was approached through the Indian High Commission for the facilities. It regretted its inability to provide information as it was unwilling to relax the 50-year-old rule governing opening of official records to private individuals.

Aid to Dadra Nagar Haveli: Now that Dadra and Nagar Haveli areas fall within the scope of India's third Plan "such financial assistance as is considered appropriate to supplement local resources will be extended to these areas by the Government."

Slum Clearance: About Rs. 350 lakhs are likely to be allocated during 1961-62 to the State Governments and Union territories in which the six major cities—Ahmedabad, Madras, Bombay, Calcutta, Kanpur and Delhi—earmarked for slum clearance, were located.

Shipping Corporation: The Shipping Corporation of India Ltd., formed by merging the Eastern and Western Shipping Corporations, will come into being on October 2. A cargo service between the west coast

of India and Japan had been started from May 30.

DLF Loan: The loan of Rs. 30 crores from the Development Loan Fund will be utilized to meet the foreign exchange expenditure on the Talcher Thermal Power Project in Orissa, the Brisingshpur Thermal Power Project in Madhya Pradesh and Sharavathi Hydro-electric Project in Mysore.

Pakistanis Without Permits: Between January, 1960 and June, 1961, 11,477 Pakistanis were arrested for crossing the East Pakistani border without legal permits.

Trade With Tibet: Indo-Tibetan trade declined from Rs. 3.56 at the time of the Sino-Indian Treaty in 1954 to Rs. 59.48 lakhs in 1960. In view of the rigid control exercised over Indo-Tibetan trade by the Chinese authorities the State Governments concerned had initiated various development schemes aimed at the economic development of the border areas in order to alleviate the distress of Indian traders.

Monazite Reserves: The reserves of monazite in the areas so far surveyed on the southern and south-western coasts of India between Kanyakumari and Trikunnappuzha are estimated at 1.4 million tons (.64 million tons on the Kerala coast and .76 million tons on the Madras coast).

Border Demarcation: The demarcation of the entire Rajasthan-West Pakistan border is likely to be completed by March 1962.

Manufacture of Tractors: A scheme for the establishment of a new industrial undertaking at Ghaziabad in Uttar Pradesh for the manufacture of "Renault" agricultural tractors has been approved by the Government "in principle".

20 Killed By Nagas: Naga hostiles killed eight members of the security forces, three other officials and nine non-officials—a total of 20—during the period April-July this year.

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PARLIAMENT ADJOURNED SINE DIE

Parliament went into recess on September 8 and will re-assemble in late November, the Lok Sabha on November 20 and the Rajya Sabha a week later.



CRICKET

England-Australia Test Series

Subba Row, 137, playing in his last test, and Ken Barrington, 83, made a magnificent match-saving 172-run stand and forced a draw on Australia in the fifth and final test played at Oval in London on August 17, 18, 19, 21 and 22. **Scores:** Australia—494; England—256 and 370 (for 8 wickets).

Australia who retained the "Ashes", thus won the series 2-1.

County Cricket Championship

Hampshire won the County cricket championship for the first time in their history when they beat Derbyshire by 140 runs at Bournemouth, Hampshire, on September 1.

Hampshire's previous best performance was when they finished second to Surrey in 1958.

Yorkshire, last year's County Cricket champions, beat Hampshire, the 1961 winners of the title, on September 5 and clinched second place in this year's final table.

Final Positions: The following are the final positions in the county cricket championship table, after the 1961 programme was completed.

	P	W	L	D	ND	P	A
Hunts	32	19	7	6	0	268	8.37
Yorks	32	17	5	10	0	250	7.81
Mid dex	28	15	6	6	1	214	7.64
Wor'ster	32	16	9	7	0	226	7.06
Gl'ster	28	11	11	5	1	158	5.64
Essex	28	10	8	10	0	158	5.64
Derby	28	10	9	9	0	154	5.50
Sussex	32	11	10	11	0	170	5.31
Lei'ster	28	9	13	5	1	146	5.21
Som'set	32	10	15	7	0	162	5.06
Kent	28	8	8	12	0	132	4.71
Warwicks	32	9	10	13	0	150	4.68
Lancs	32	9	7	15	1	142	4.43
Gl'gan	32	9	12	11	0	128	4.00
Surrey	28	4	13	11	0	100	3.57
N'hants	28	5	13	10	0	82	2.92
Notts	28	4	20	4	0	76	2.71

LAWN TENNIS

Wightman Cup

The U.S. completed a 6-1 victory against Britain to regain the Wightman Cup lawn Tennis Trophy at Chicago on August 20.

This was the United States' 27th Wightman Cup victory in 33 contests.

ATHLETICS

World Pentathlon Championships

The Soviet Union won the 1961 modern pentathlon world championships in Moscow on August 23, taking both team and individual titles.

Hungary were second and the United States third in the team competition.

RECORDS

Jump Mark Improved

Valeri Brumel, of the Soviet Union, broke the World High Jump record with a leap of 2.25 metres (7 ft. 4½ inches) at the World Student Games at Sofia on August 31.

T. Press lowers her own Mark

Tamara Press, Soviet Union, on September 1 beat her own world and European records in the women's discus throw of the World Student Games in Sofia with a toss of 58.06 metres. Her old mark was 57.43 metres set in July in Moscow.

World Mark in Weightlifting

A new middleweight weightlifting world record was set on September 9 by Vasily Stepanov Sukhumi.

Stephanov pressed 157.58 kilograms, a kilogram more than the previous record set at the Rome Olympics.

SPORTS INFORMATION

Disciplinary Action Against Pak Cricketers

Disciplinary action has been taken against Pakistan cricket captain Fazal Mahmood and star batsman Hanif Mohammed who forfeited part of their good conduct bonus on the last Indian tour.

The decision to penalize them was taken.

by the Pakistan Cricket Control Board. Three more Test cricketers whose names remained undisclosed were also admonished for misbehaviour during the tour.

In his report to the Pakistan Board, Dr. Jehangir Khan, manager of the team, is understood to have accused Fazal Mahmood of queering the pitch by pencil marking the pitch at Kanpur. Dr. Khan has also taken strong objection to Fazal's farewell speech in Delhi, where the Pakistan skipper criticised the Indian Board and castigated the umpires.

According to the report, Hanif has been accused of "sordid" behaviour by openly flouting the Indian Board's advice in the Lala Amarnath benefit match in Bombay.

The Pakistan manager also objected to Hanif entering into an argument with umpire Ganguli when the latter no-balled Haseeb.

According to the report, Fazal Mahmood:

(1) Manoeuvred invitations for dinner or lunch from Indian screen stars despite the manager's disapproval;

(2) did not put his heart into the job and avoided playing to zonal matches;

(3) declared himself fit for the Tests where he bowled with a curailed run due to some physical handicap;

(4) generally turned up late at night at the hotels.

Haneef has also been accused of showing professional tendencies and bargaining before playing in the Tests.

All-time Ten Tennis Top Players

Pancho Gonzales has stepped to the all-time top in tennis, even above the immortal Bill Tilden, according to Mercer Beasley, 79-year-old tennis coach who turned out dozens of champions.

Beasley's list of ten all-time top players consists of:—

1. Pancho Gonzales, 2. Bill Tilden, 3. Jack Kramer, 4. Don Budge, 5. Lew Hoad, 6. Ellsworth Vines, 7. Fred Perry, 8. Henri Cochet, 9. Frank Parker, and 10. Bobby Riggs.

The M.C.C. Team

The M.C.C. party captained by E.R. Dexter to tour India and Pakistan this win-

ter include seven players who appeared in the series recently completed against Australia. Apart from Dexter, they are M. J. K. Smith (Vice-Captain), D. A. Allen, K. F. Barrington, G. A. R. Lock, J. T. Murray and G. Pullar.

Generally they are a promising young team of enthusiastic cricketers.

The team:

E.R. Dexter (Sussex, captain),
M.J.K. Smith (Warwickshire, vice captain),

D.A. Allen (Gloucestershire),
K.F. Barrington (Surrey),
A. Brown (Kent),
B.R. Knight (Essex),
G.A.R. Lock (Surrey),
G. Millman (Nottinghamshire),
J.T. Murray (Middlesex),
P.H. Parfitt (Middlesex),
G. Pullar (Lancashire),
P.E. Richardson (Kent),
W.E. Russell (Middlesex),
D.R. Smith (Gloucestershire),
D.W. White (Hampshire).

They have four regular opening bats in Pullar, Richardson, Russell and Parfitt, Murray, the real "discovery" of the current England Test team, will have G. Millman as his reserve wicket-keeper.

Awards for Cricket Stars

N. O'Neill, the Australian batting star, won two prizes each of £400 for his performances in the Test series against England, which ended at The Oval recently.

The Australian cricketers earned a total of £6,120 against England's £760 in prizes offered by a tobacco company.

O'Neill's awards were for the fastest century of the series (second in 168 minutes) and the fastest individual scoring rate throughout the series (2.12 minutes per run).

England's total prize money was £560 for winning the third Test, and £200 won by Trueman, a half-share of the prize for the most wickets in an innings. Trueman and the Australian captain Benaud each took six wickets on one occasion.

For the faster rate of scoring in the five Tests—Australia £2,800, most wickets in the series—Davidson (Australia) £400 (23 wickets), most of the catches; (excluding wicket keepers) Simpson (Australia) £400 (seven catches). Wicket-keeper with high

number of victims in excess of 15—Grout (Australia) £400 (50 victims).

For winning two Tests at £560 each—Australia £1,120. For winning one Test—England £560.

English Channel Swimmers: Two Records

Margaret White, 17, a student nurse of Essex, became the youngest person to swim the English Channel on September 2.

She landed near Dover 15 hr. 8 min. after leaving Cape Gris Nez.

Miss Montserrat Tresseras, 27-year-old Spanish typist, stepped ashore at Cap Gris Nez on September 5 after swimming the English Channel from Dover. Her time was 16 hours and 25 minutes.

It was her second Channel swim attempt within a month. On Aug. 16, she got to within half a mile of Cap Gris Nez after swimming from Dover when she gave up through exhaustion.

Nitindra Ray, 21 of Calcutta, swam the English Channel on September 5 from France to England—the first man to do so this season. Ray's time was 19 hours. Four other successful swims have all been by women.

Ray had failed in an earlier attempt this year after being 12 hours and seven minutes in the water.

Brojen Das, 30-year-old Pakistani, waded ashore near Dover on Sept. 5 after swimming the English Channel for a record fifth time, reports AP.

The previous record number of swims was held by Florence Chadwick of San Diego (California) who made four crossings.

Das swam from Cape Gris Nez to the Kent coast in a personal best time of 11 hours 48 minutes.

Lake Michigan Crossed for the first time

An exhausted 33-year-old research chemist became the first person to swim across Lake Michigan and set two world records in the process on August 23.

Ted Erikson, a rocket fuels expert, climbed out of the water after swimming 36½ hours in stormy Lake Michigan, an endurance record for open water distance mark for more than 40 miles.

The distance across the lake is only 36½ miles but Erikson was forced to de-

tour several times and was actually blown back into the lake by a storm as he neared his goal.

A crowd of nearly 5,000 had waited much of the day to greet him but many were driven home by a chill wind before Erikson reached his goal.

This was the fifth year the marathon swim has been attempted and the first time it was completed.

Ayala Turns Pro

Chilean tennis champion Luis Ayala will turn professional to join Jack Kramer's professional team, it was reported on August 23.

Alexander Retires

F. C. M. "Gerry" Alexander, the West Indies wicket-keeper-batsman, has announced his retirement from representative cricket.

Alexander, who captained the West Indies said in Kingston, Jamaica, "After all I must devote some time to my work."

Alexander gained blues at Cambridge for cricket and football and won an England amateur soccer cap.

Aged 32, he was vice-captain to Frank Worrell on the West Indies tour of Australia earlier this year, heading his team's Test with an average of 60.80.

Against England in 1959-60, he claimed 23 victims in the series to equal the world record.

Somerset Cap For Abbas Ali Baig

Indian Test cricketer Abbas Ali Baig was awarded his Somerset county cricket cap on August 14.

Baig scored a century on his first appearance for India against England in 1959.

Bradman Named Cricket Board Chief Again

Sir Donald Bradman was appointed on September 13 as a Chairman of the Australian Cricket Board of Control for a second term.

Happiness is the only sanction of life: where happiness fails, existence remains a mad and lamentable experiment.

—George Santavana

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Problems are only opportunities in work clothes.

—Henry J. Kaiser

Appointments, Awards etc.

APPOINTMENTS

His Excellency, **Dr. Koto Matsudaria**, Ambassador-designate of Japan, presented his credentials to the Vice-President, **Dr. S. Radhakrishnan**, on August 22.

Mr. Mario da Costa Guimaraes was appointed Ambassador of Brazil in India on August 23.

Mr. Ferhat Abbas, 61-year-old Chemist-turned-politician, was replaced on August 27 as the Prime Minister of Nationalist Provisional Government of Algeria by **Mr. Ben Youssef Ben Kheda**.

Major General A. S. Pathania, was appointed Director of N.C.C. in place of Major General **R. S. Paintal** on August 28.

Mr. P. C. Bhattacharya was officially appointed Governor of the Reserve Bank of India on August 31 in place of **Mr. H. V. R. Iyenger**.

The Government of India decided to open a mission at Dar-es-Salam (Tanganyika) and to appoint **Mr. M. A. Vellodi** as Commissioner for India to Tanganyika.

The President recognised on September 1 **His Highness Maharaja Madhav Rao Jiawaji Rao Scindia** as the Ruler of Gwalior from July 17 last in succession to His late Highness Maharaja Jiawajirao Madhav Rao Scindia.

Dr. Cheddi Jagan, leader of the People's Progressive Party of British Guiana, was sworn in as British Guiana's first premier by Governor **Sir Ralph Gray**, at George Town on September 5.

Mr. Joao Goulart was sworn in on September 7 as the figurehead President of Brazil, ending for the moment 13 days of political crisis which threatened the country with civil war. He formally took office on September 10.

Mr. Ianacu Horattu was appointed Ambassador of Rumanian Peoples' Republic in India on September 8.

On September 9 the Brazilian Congress approved the appointment of 50-year-old Social Democrat, **Senhor Tancredo Neuer**, as the country's first Prime Minister and Minister of Justice.

Mr. Janos Kadar, First Secretary of the Hungarian Communist Party, took over the post of Prime Minister of Hungary from **Dr. Ferenc Munnich** on September 13.

RESIGNATIONS ETC.

Cambodia's King and Chief of State,

Prince Norodom Sihanouk, handed his resignation to the Parliament on August 14.

Senhor Janio Quadros resigned on August 25 as President of Brazil, saying: "I have been beaten by reaction". His Cabinet also resigned the same day.

Mr. Ajit Prashad Jain, President of the U.P. Congress Committee, resigned his Lok Sabha seat with effect from September 5.

AWARDS

King Mahendra of Nepal was presented the Pakistan's highest civil award—Nishan-i-Pakistan—on September 10, because of the "laudable measures" he had taken for the progress of the Nepali people.

VISITORS

A two-member Chilean Parliamentary delegation arrived in New Delhi on August 21 on a three-day visit.

The then Hungarian Prime Minister, **Dr. Ferenc Munnich**, accompanied by his wife, arrived in New Delhi on August 28 on their way to Belgrade.

King Mahendra and the Queen **Ratna Rajya Lakshmi** of Nepal and the Burmese Prime Minister, **Mr. U Nu** arrived in New Delhi on August 23 on their way to Belgrade.

OBITUARY

Dr. Moulvi Abdul Huq (93), well-known Urdu scholar, died in Karachi on August 16.

Seventy-two-year-old **Maulana Ataullah Shah Bukhari**, a well-known nationalist leader in the undivided India, died in Multan on August 21 after protracted illness.

Dr. Imkongliba Ao (58), President of the Naga People's Convention and Chairman of the Interim Body of Nagaland, who was shot and wounded in the abdomen by a Naga hostile, died in Shillong on August 24.

The High Commissioner for Ghana, **Nana Kwabena Kena II** (48), died of a heart attack in New Delhi on August 28.

Dr. Subodh Mitra, Vice-Chancellor of Calcutta University and head of the Chittaranjan Cancer Institute, Calcutta, died in Vienna on September 5.

Lord Pethick-Lawrence, former Secretary of State for India and Burma, died in London on September 11.

Mr. Sant Singh (79), former Indian Ambassador to Ethiopia, died in New Delhi on September 13.

NEWS Diary



AUGUST

14. Sweden launched its first rocket from a launching site in Lapland. Sweden thus became the eighth country to launch a rocket into space, the others being, USSR, USA, UK, France, Italy, Japan and Israel.

Mr. Jomo Kenyatta was transferred to Gatundu in his home district of Kiambu.

The Congress Parliamentary Party decided to amend its constitution to provide for two Deputy Leaders—one from each House of Parliament—but postponed the election of the Deputy Leaders till after the General Election next year.

The Lok Sabha unanimously adopted the Constitution (Tenth Amendment) Bill which provides for the integration of Dadra and Nagar Haveli with the Indian Union. This was for the first time that the Constitution was amended unanimously.

15. The Akali leader, Master Tara Singh, began his indefinite fast-unto-death in Amritsar. A counter fast-unto-death was also undertaken by Yogiraj Suryadev, in Amritsar.

The Andhra Pradesh set up the Law Commission, the first of its kind in the country.

A Portuguese note received in New Delhi today challenged the right of the Indian Parliament to legislate for the integration of Dadra and Nagar Haveli.

16. Agreements of loans from the U.S. totalling 62.9 millions (Rs. 30 crores) for three power projects were signed in New Delhi.

Swami Rameshwara Nand, President of the Hindi Raksha Samiti, began an indefinite fast-unto-death in Delhi to oppose the Akali demand for a Panjabi Suba and to strengthen Hindu-Sikh unity.

Dr. Hastings Banda's Malawi Congress Party won a sweeping victory in Nyasaland's first general elections.

17. The Panjab Governor, Mr. N. V. Gadgil, dismissed Rao Birendra Singh, the Panjab Minister for Revenue, Consolidation, Relief and Rehabilitation, Sports and Games, from the Panjab Ministry, in exer-

cise of the powers vested in him under Article 164 of the Constitution.

Mr. Udham Singh Nagoka, Chairman of the Panjab Branch of the Swatantra Party, was arrested in Amritsar under the Preventive Detention Act and taken to the Yole camp in Dharamsala.

The United States, Britain, and France protested to the Soviet Union against East Germany's recent measures in Berlin and warned that grave dangers could result from such actions.

18. The Panjab Government lifted the ban on publication of any news or comments relating to the Panjabi Suba agitation, Master Tara Singh's fast and the language controversy.

Under an agreement signed in Tokyo today, India will receive a Japanese yen credit worth \$80 million (over Rs. 38 crores) for the first two years of her Third Five Year Plan.

19. The Soviet Union categorically rejected the U.S. protest against closing the frontier between East and West Berlin and indicated that the barrier was likely to stay there until a new agreement is made.

The U.S. Rockefeller Foundation gave a grant of \$65,000 to the Government of India for the purchase of modern laboratory and field research equipment for the Central Potato Research Institute, Simla.

20. According to the Reserve Bank of India's Report on Currency and Finance, a striking advance in industrial production, an improvement in agricultural output, and a rise in total investment were the highlights of the Indian economy in 1960-61.

21. The restriction order on the movements of Mr. Jomo Kenyatta were removed, making the 71-year-old African leader a completely free man after nine years.

The Government of India signed an agreement with Vickers-Armstrongs for the manufacture of 1,000 37-ton tanks at an ordnance factory to be built at Avadi, near Madras.

22. Dr. Cheddi Jaga's Leftist People's Progressive Party secured an absolute majority in British Guiana's first internal

self-Government elections when they secured 19 of 35 Legislative Assembly Seats.

Tunku Mahmud, former Crown Prince and heir to the throne of the Sultan Johore (Malaya), was married in Kuala Lumpur to Princess Zanariah, "Miss Malaya, 1961".

Pakistan Government closed down its consulates in Jalalabad and Kandhar.

23. The U.S. launched at Cape Canaveral its first long-range spaceship Ranger I, intended to pioneer the path to the moon—but the craft went into the orbit instead. The spaceship started circling the earth.

24. The West Berlin city Government ordered the closing of all Communist Party Offices in West Berlin.

The leader of the Naga hostiles, Mr. Phizo, applied for U.K. citizenship on the ground that "he is a Commonwealth citizen and has completed one year in the U.K."

The Kenya African National Union and the Kenya African Democratic Union agreed to form a coalition Government under Mr. Jomo Kenyatta's leadership.

25. The three-day talks in New Delhi between Mr. Nehru and Sant Fateh Singh ended in smoke.

President Ayub Khan pleaded for a compromise on Kashmir.

The U.N. General Assembly called on France and Tunisia to begin "immediate negotiations aimed at the withdrawal of all French armed forces from Tunisian territory."

26. The Burmese Parliament, in a joint session, passed the State Religion Bill. Burma thus became the first country to be proclaimed a Buddhist State in the 20th century.

27. Warrants of arrest were issued against Master Tara Singh, Sant Fateh Singh, and other Akali leaders now residing inside the Golden Temple.

Chilean authorities smashed a Castro-type plot to launch an insurrection from headquarters in the rugged Andes Mountains.

28. The African summit conference collapsed when President Nasser of U.A.R. Proposed that the six Casablanca Powers should meet at the ministerial level.

It was announced in Oporto (Portugal) that every native of Portugal's overseas provinces is a full citizen of Portugal as from now.

29. Mr. R. K. Karanjia, Editor of 'Blitz', was reprimanded by the "High Court of Parliament" for a "gross breach of privileges and contempt" of the Lok Sabha. The Lok Sabha has exercised this authority and sovereignty of Parliament for the first time in its history.

30. The Soviet Union announced that it would resume nuclear tests and said it was developing nuclear bombs with the power of 100 million TNT which could be delivered to any point on the globe.

31. Swami Rameshwaranand, President of the Hindi Raksha Samiti, broke the fast-unto-death which he began on August 16.

SEPTEMBER

1. Belgrade Conference of 24 Neutral Nations opened in Belgrade, capital of Yugoslavia (Later when Congo also joined the conference the number of nations attending the conference became 25.)

The United Nations broke off all normal relations with the Katanga Government.

2. The Brazilian Chamber passed a Constitutional amendment instituting a Premier-led parliamentary regime instead of the presidential system of Government.

3. Chinese Communist shore batteries pounded the Quemoy islands with 121 shells at Taipei.

4. The Afghan consulate in Peshawar was closed down as ordered by the Pakistan Government.

The Punjab Police uncovered a plot to assassinate the Chief Minister, Mr. Pratap Singh Kaur and arrested Mr. Banta Singh, an Akali worker, in this context.

5. A plot to overthrow the Haitian Government and assassinate President Francois Duvalier was discovered by Haitian authorities.

The five-day conference of 25 unaligned nations ended in Belgrade.

6. Mr. Nehru arrived at Vnukovo airport (Moscow) after attending the non-block conference at Belgrade.

Commodore R. S. David, Commodore-in-charge, Cochin, commissioned I.N.S. "Hansa", a new naval shore base establishment, at Coimbatore.

Afghanistan severed diplomatic ties with Pakistan.

The diplomatic representation status between India and Jordan was raised to Embassy level.

President Kennedy announced the resumption of the nuclear tests by the U.S.

Nepal became a member of the International Monetary Fund and of the International Bank of Reconstruction and Development.

7. A Hindu Yogi from Andhra, who described himself as a friend of the Sikhs, began his fast near Master Tara Singh in Amritsar.

Portugal lodged a protest with Security Council that India, had threatened military action against Goa.

The United States and France concluded an agreement providing for the training of French NATO forces in the use of U.S. atomic weapons.

9. President de Gaulle narrowly escaped death by assassination when an attempt was made to set off plastic explosive under his car, 100 kilometres south-east of Paris.

Geologists of the Government of India discovered a coal-belt in the Rangit river (Sikkim) covering an area of 40 to 60 miles.

11. Prime Minister Nehru returned to the capital from Moscow.

12. Eighty-nine-year-old Lord Bertrand Russel was jailed by a London magistrate for refusing to be bound over to "keep the peace" for seven days.

The Commonwealth Consultative Committee began its three-day conference in Accra.

An agreement was signed in New Delhi between the State-owned oil organisations of India and France for carrying out oil exploration in the Jaisalmer area in Rajasthan.

13. America's trial shot for orbiting a man round the earth—a Mercury capsule carrying a "mechanical" astronaut—successfully circled the earth.

United Nations forces seized strategic points in Elizabethville to gain control of the Katanga province and declare it under the authority of the Central Congo Government.

The "Union Africaine et Malgache" (African and Malagasy Union) was set up when representatives of 11 French-speaking African States and Malagasy Republic signed a charter in Tananarive.

India and Bhutan signed an agreement for the construction of a hydro-electric project on the Bhutan-West Bengal border.

CO-OPERATIVES IN INDIA

For development of co-operation in the country, the estimated expenditure during the Second Plan period was Rs. 34 crores as against Rs. 7.11 crores during the First Plan period.

Over the period of the First and the Second Plans, the number of primary agricultural credit societies rose from about 105,000 to 210,000 and their membership increased from 4.4 million to about 17 million. The total loans advanced by these societies rose from Rs. 23 crores to Rs. 200 crores over this period.

The number of co-operative societies of all other types rose to 2.84 lakhs and their membership increased to 24.8 million till June 1959. The weavers' and other industrial societies together numbered about 25,000. The progress of non-credit societies, such as cane supply societies, consumers' societies and housing societies, was also significant.

The share of co-operatives in the total production of sugar in the country increased to 11.4 per cent in 1960 and in view of the success, a National Federation of Co-operative Sugar Factories has now been organised.

The Third Plan provides Rs. 80 crores for the development of co-operation and contains specific programmes for co-operative credit and supplies, marketing and processing, consumer co-operatives and industrial and other co-operatives.

In the next five years, the number of primary co-operative societies is expected to increase to 2,40,000 and membership to 37 million, covering about 60 per cent of the agricultural population.

The total amount of short and medium term credit is expected to be of the order of Rs. 530 crores and that of long term, Rs. 150 crores by 1965-66.

By the end of 1965-66, a co-operative marketing society, designed to secure a remunerative price to the agriculturists for food and crops, is to be set up at or near each of the 2,500 Mandis in the country. About one-fourth of the marketable surplus of the principal foodgrains and about one-third of commercial crops is expected to be handled by these societies by the end of the Third Plan. The number of rural godowns connected with these societies is expected to increase from the present 4,100 to about 9,200. ***

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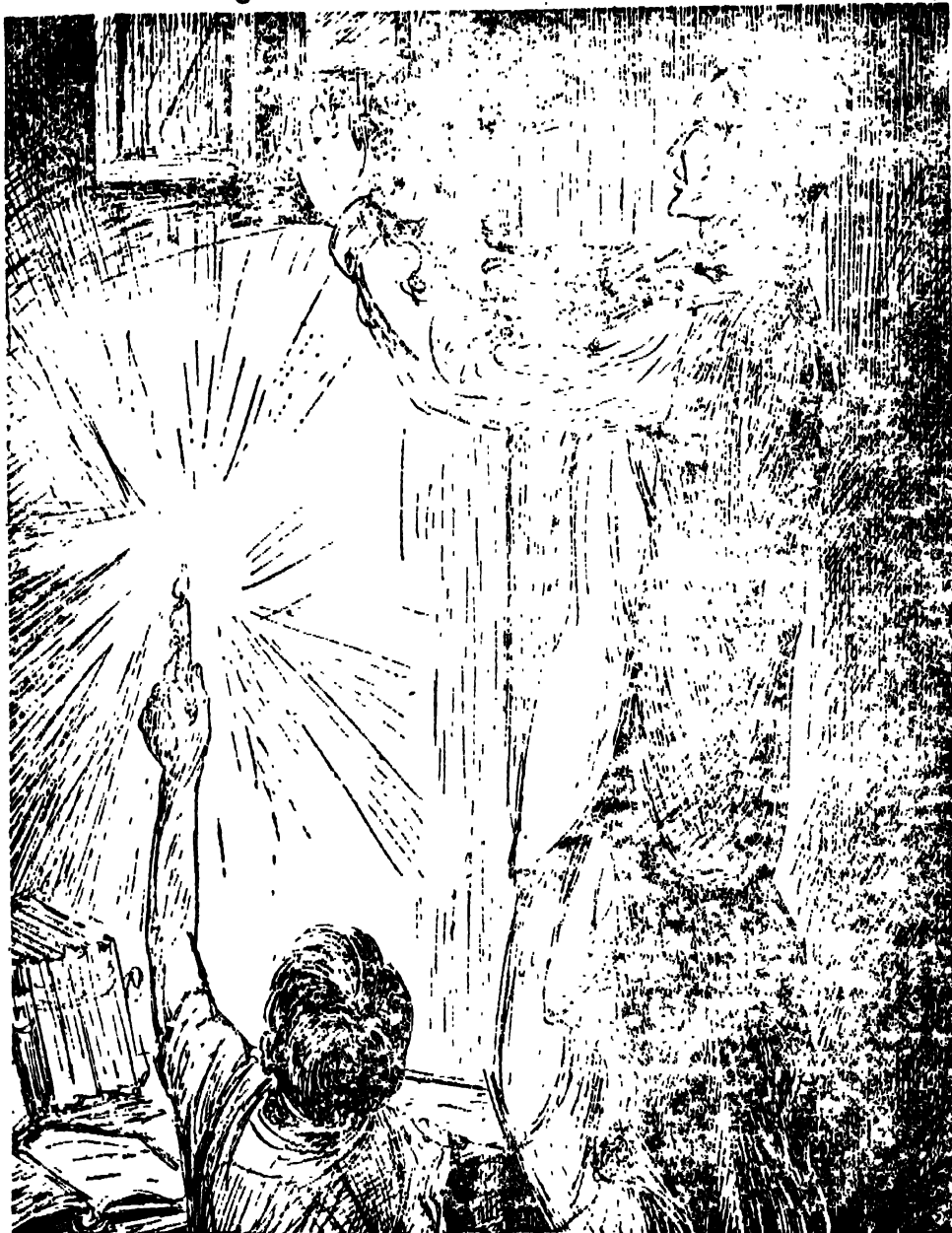
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Keeping his house bright

Lights off; a fuse blown. The man of the house works deftly replacing the fuse. In many ways this is a deeply symbolic action—a father working hard to keep his home bright and cheerful.

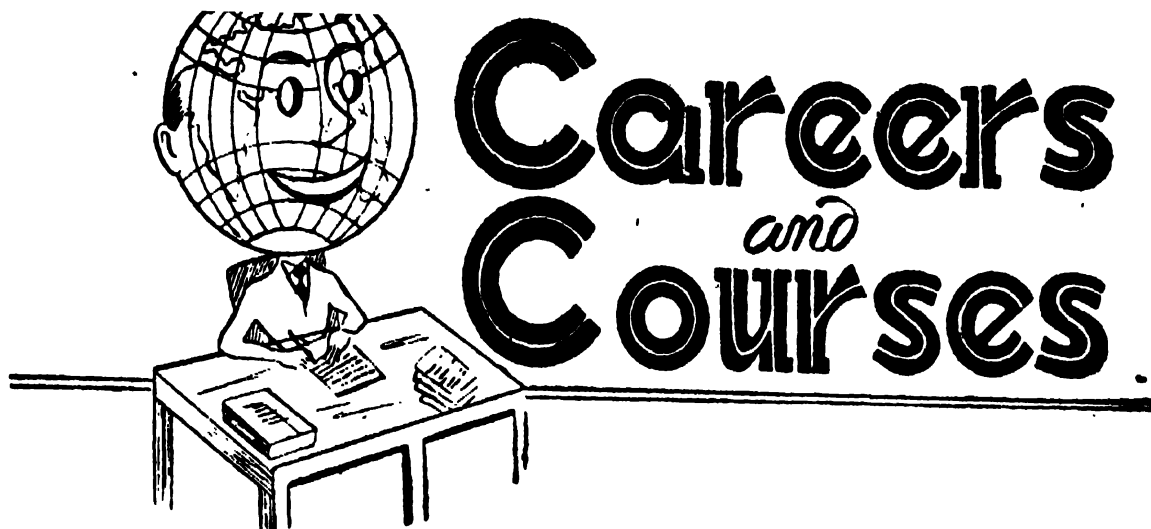
In financial terms too you strive to maintain your family in comfort. But can you be sure that all would be well if you are not there to care for them? You can, through a Whole Life Policy.

As an example, at age 30, a man can make sure that his family will receive Rs. 10,000 in the event of their losing him. And he need pay only Rs. 19 a month for this unique security.

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EDITORIAL

THE BERLIN CRISIS

For the last few months the centre of cold war has once again been shifted to Berlin. For the past sixteen years the problem of Berlin has defied any solution and as the time passes the problem becomes more aggravated. The Berlin question is a legacy of the Second World War and until a peace treaty is signed with Germany—united or divided—the Berlin issue cannot be settled. Mr. Khrushchev has declared to sign by the end of this year a peace treaty with East Germany and hand over full control to East German Government of the Soviet sector of Berlin. But the Western Allies have stated that they would not recognise a unilateral peace treaty with East Germany in which Berlin is situated. The West wants to keep Berlin as a separate entity while the Soviets want to absorb it in their communist fold. To Western Allies Berlin is a "showcase" of freedom while to the Soviets it is a "bone in their throat". The tension which had been keyed-up to the explosion point with the closing of frontiers between East and West Berlin, has partially eased as the West has agreed to negotiate with the Soviet Union on a settlement of the Berlin problem. As both sides are adamant on the stand they have taken over the Berlin issue, there is very little hope that a mutually acceptable solution will be found by negotiations. But one thing is certain, that no one is going to risk a nuclear war over Berlin. There have been crises over Berlin in the past and the situation had become pretty serious but the Soviets always backed out to carry their threats. It is hoped the present crisis over Berlin will also pass over like the past.

The present crisis over Berlin was started by Mr. Khrushchev when he declared in a televised broadcast in Moscow on June 15, 1961 that a peaceful settlement of the Berlin and German questions "must be attained this year", adding that the Soviet Union would sign a separate peace treaty with Eastern Germany if such a treaty were not signed by all the Powers who had been at war with Germany. He also said that the Oder-Neisse frontier between Germany and Poland was final, and any attempt to change it would involve the risk of "thermo-nuclear war". Mr. Khrushchev also pointed out that in the event of a peace treaty between the U.S.S.R. and the German Democratic Republic, the Western Powers would have to negotiate with the East German authorities on the question of access to West Berlin by road, water and air. For West Berlin he proposed the status of a "free city" under a regime of its choosing, with guaranteed access to and contacts with the rest of the world.

Speaking at a Moscow ceremony on June 21, the 20th anniversary of the German invasion of the USSR, Marshal Chuikov, who commanded the Soviet 62nd Army which defended Stalingrad, asserted that the Western Powers had no rights in Berlin because the city was captured by Soviet troops and there were no Western forces "within many miles of Berlin" when the war ended.

The Western reaction to Soviet threats was quick and firm. In a statement on June 22, the U.S. Secretary of State, Mr. Dean Rusk, emphasized that the Western Allies were in Berlin "by right", that they

were there to protect the freedom of the people of West Berlin, and that the USA could "not accept the validity of any claim to extinguish its position in Berlin by unilateral action". The U.S. State Department spokesman, Mr. Lincoln White, similarly emphasized on June 23 that Western rights in Berlin stemmed from the agreements reached with the Soviet Union at the end of the Second World War. Replying specifically to Marshal Chuikov's "specious" argument that the Western Allies had no rights in Berlin, Mr. White recalled that the Western forces had occupied, and subsequently relinquished to Soviet control, large areas of what is now Eastern Germany.

In a broadcast to the American people on July 25, President Kennedy reaffirmed the right of the Western Allies to be in Berlin and to enjoy free access to that city, declaring that "we cannot permit the Communists to drive us out of Berlin, either gradually or by force". He also emphasized that the freedom of West Berlin was "not negotiable", but declared his readiness to "search for peace in formal or informal meetings".

On July 17, 1961 the U.S., Britain and France presented similarly worded notes to the Soviet Government, wherein the three Western Powers emphasized that they would not recognise any unilateral Soviet attempt to end their existing rights in Berlin. The Soviet Government replied on August 8 and once again demanded the early conclusion of a German Peace Treaty with both German States. The Soviet Union reiterated that it would sign a separate treaty with the German Democratic Republic if the Western Powers refused and without the participation of the Western Powers "reluctantly".

On August 13 the East German authorities sealed off the border between East and West Berlin, and also between West Berlin and the surrounding East German territory, leaving only 13 official crossing-points open. A special broadcast said that these measures would remain in force until the conclusion of a peace treaty; and that they had been taken "in the interests of peace in Europe and of the security of the G.D.R. and of the other Socialist States".

As a result of the closing of the border except for the official crossing-points, the flood of refugees from East Berlin dwindled

to a trickle. Nevertheless, some 1,500 succeeded in escaping into West Berlin during the day across backwards, gardens and bombed sites, and in some cases by swimming canals and the River Havel.

The Brandenburg Gate, one of the 13 official crossing-points still remaining open, was sealed by the East German authorities on August 14, when armed People's Police accompanied by armoured cars took up positions on the East Berlin side of the Gate. During the night of August 17-18 a concrete barrier up to 6 ft. high and topped with barbed wire—promptly nicknamed by West Berliners "Ulbricht's Chinese Wall"—was erected in the Potsdamerplatz by Communist "shock workers".

In a broadcast on August 18, Herr Ulbricht said that the sealing-off of the East Berlin would "facilitate the conclusion of a peace treaty and the solution of the West Berlin problem".

The following additional restrictions were imposed by the East German authorities during the night of August 22: (a) the establishment of a "no-man's-land" of 100 metres' width on both sides of the border; (b) reduction of the number of crossing-points to six; and (c) an announcement that West Berliners would not be allowed to enter East Berlin without special visas, in order to prevent the entry of "spies and provocateurs" into the Eastern sector.

The Western Allied commandants immediately denounced the "no-man's-land" order as "effrontery," and on the following day about 1,000 U.S., British, and French troops patrolled up to the sector boundaries within the 100-metre radius with tanks, armoured vehicles, and anti-tank guns.

Strong protest Notes were delivered in Moscow on August 17 by the British, U.S., and French Governments, in almost identical terms, at the Berlin border restrictions imposed by the East German authorities.

The Western protests were rejected on August 19 by the Soviet Government, which stated that it "fully understands and supports the G.D.R. Government in establishing effective control on the border with West Berlin in order to block the subversive activities being conducted from West Berlin against the G.D.R. and other Socialist countries".

At the request of President Kennedy, Vice-President Lyndon Johnson paid a two-

day visit to West Berlin on August 19-20 to make an on-the-spot survey and to demonstrate "American interest" in the Berlin situation. Some half a million West Berliners gave Vice-President Johnson an enthusiastic welcome on his arrival. Equally enthusiastic scenes occurred in West Berlin on August 20 with the arrival of 1,500 American troops, with 250 vehicles, sent as reinforcements for the U.S. garrison in Berlin.

The Soviet Government sent identical Notes to the three Western Powers on August 23 alleging that "revanchists, extremists, saboteurs, and spies" were being allowed to travel along the air corridors linking Western Germany with West Berlin, and calling on the U.S., Britain and France to stop what were described as "unlawful and provocative activities" by Western German politicians in West Berlin.

A statement was issued from the White House on August 24 describing the Soviet Note as containing "false" allegations and "slandorous remarks" and giving a "solemn warning" that Russian or East German interference with free access to West Berlin would be "an aggressive act for the consequences of which the Soviet Government would bear full responsibility".

The Western Allies on September 8 sharply rejected the Soviet accusations about misuse of air corridors, and repeated "in the most solemn terms" the warning against any interference with Allied flights.

There has been no new development in the Berlin situation for the last two months and there is no hope of any change unless Mr. Khrushchev gives practical shape to his threat of unilaterally signing a peace treaty with the German Democratic Republic.

To view the Berlin problem in its proper perspective, it would be better to review the history of Berlin since the end of Second World War. In accordance with the London Protocol of September 12, 1944, on the Zones of Occupation and the Administration of Greater Berlin, as well as the London Agreement of November 14, 1944, on the Control Machinery in Germany, both concluded between the U.S.A., Britain and the Soviet Union and later acceded to by France, Berlin was occupied in July 1945 by armed forces of the Four Powers and placed under the administration of an inter-Allied Kommandatura. The Kommandatura

was directly and exclusively subordinate to the Allied Control Council set up for the whole of Germany. Thus Berlin was constituted a special area of occupation, having a status of its own and belonging to none of the other four occupied Zones of Germany. On March 20, 1948, the Soviets walked out of the Allied Control Council for Germany. On April 1, they imposed rail and road restrictions on Allied traffic to Berlin. On June 16, they walked out of the Berlin Kommandatura. On June 24, the Soviets totally severed all land and water routes between Berlin and the Western Zones of Germany. Their undisguised intent was to force the Western Allies out of Berlin and starve the people of the city into the Communist fold. For the next 11 months food, coal, and all else necessary to keep alive the people of West Berlin and supply to forces of the Western Allies in Berlin, was transported by air. Tacitly admitting their failure to oust the Western Powers and swallow all of Berlin, the Soviets lifted the blockade in May 1949. At the subsequent conference of Foreign Ministers in Paris in June 1949, the Soviet Union further pledged itself to cooperate actively in the maintenance and improvement of communications between Berlin and other parts of Germany.

On September 21, 1949, the Federal Republic of Germany came into being with Dr. Adenauer as its Chancellor. The FRG or West Germany comprises the German zones formerly occupied by Britain, U.S.A. and France. On October 7, 1949, the Soviet authorities set up their puppet regime in the Eastern zone of Germany. The East German regime proclaimed the Soviet sector of Berlin to be its capital. In a series of steps in 1954 and 1955 the Soviets purported to grant the East Germany full sovereignty. Among other things, they transferred to it the control of borders with the Federal Republic and West Berlin and over German traffic between the two areas. As the East German regime was unlawfully created and does not rest on the consent of the governed, but is kept in power by the apparatus of a police state backed by military forces of the Soviet Union, the Western nations have refused to recognise it. So have all other non-Communist nations.

On May 26, 1952, the three Western Powers signed contractual agreements ending the occupation status of West Germany.

On October 3, 1954, the FRG was admitted to full partnership in the Western European Union (Brussels Treaty) and NATO. As West Berlin remains under joint Allied trusteeship, it is not part of the West Germany, although Article 23 of the Basic Law of FRG claims Berlin as one of its constituent States. From 1954 to 1958 various attempts were made by Western Powers to find a solution to Berlin problem but all efforts were stalled by the Soviets. Late in 1958, the Soviet Union launched its second major assault on the freedom of West Berlin.

In a speech on November 10, 1958, Mr. Khrushchev made a statement on the Soviet Union's intention to transfer control of East Berlin to the East German Government. His statement confirmed an earlier statement made on October 27 by Herr Ulbricht (First Secretary of the East German Socialist Unity Party) in which he said: "The whole of Berlin lies within the territory of German Democratic Republic. The whole of Berlin area belongs to G.D.R. and the authority of the Western occupying Powers no longer has any legal basis in Berlin".

The British, U.S. and French Governments reacted firmly to Khrushchev's announcement, official statements were issued stressing that the Western Powers were in West Berlin by right, and that their status in this respect derived not from the Potsdam Agreement but from the Four-Power declaration of June 5, 1945, and the agreements with the Soviet Union concluded on May 4, 1949, after the ending of the Berlin blockade. These multilateral arrangements could not be invalidated save by common agreement between the four parties.

The Soviet proposals for Berlin were handed over on November 27 to U.S., U.K., France and West Germany. The principal Soviet proposal was that West Berlin should become a demilitarized Free City, with Britain, France, the U.S.A., the Soviet Union, and possibly the United Nations, guaranteeing its status. Under a separate agreement East Germany would guarantee communications between West Berlin and the outside world, in return for an undertaking by West Berlin not to tolerate "subversive activity against Eastern Germany". If by the end of six months no agreement had been reached on this proposal between the Soviet Union and the Western Powers, the Soviet Government would carry out its

plans in agreement with Eastern Germany, which Government would carry out its plans in agreement with Eastern Germany, which would then be able to exercise full sovereignty by land, sea, and air over the approaches to West Berlin.

The Foreign Ministers of U.K., U.S., France and GFR issued a communique on December 14, 1958, in Paris affirming the determination of their Governments "to maintain their position and their rights in Berlin, including the rights of free access".

In a statement on January 21, 1959 Herr Walter Ulbricht said that the German Democratic Republic regarded the present frontiers of Germany as "final and unalterable". He pointed out that Germany's former "peace borders" had been lost as the result of "Hitler's adventures", that the present frontiers had been in existence for 14 years, and that both Britain and U.S.A. had helped in fixing the post-war frontiers and had agreed to the resettlement of the German population of the former eastern provinces.

On January 10, 1959 the Soviet Government sent Notes to the U.S., U.K. and France and to all other countries which were at war with Germany between 1939-45 and to the East and West German Governments, proposing the holding of a peace conference within two months, either in Prague or Warsaw, to draw up a German peace treaty. A Soviet draft of a peace treaty with Germany was also sent to the countries concerned.

The three Western Powers and also Federal Germany replied on February 16, 1959 to Soviet Note of January 10. While reserving the Western position with regard to rights in Berlin, the British, French and American Governments proposed a four-Power Conference of Foreign Ministers to discuss "the problem of Germany in all its aspects and implications".

On March 2, 1959, the Soviet Union proposed a "summit" conference of the Heads of Governments, to take place at the end of April in Geneva or Vienna, also agreed to a conference of Foreign Ministers before the "summit".

The Foreign Minister's Conference opened in Geneva on May 11, 1959 and adjourned without tangible progress on August 5, 1959. The three Western heads of government

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National Integration In India

By HUMAYUN KABIR

Union Minister of Scientific Research and Cultural Affairs

Throughout Indian history, we find on the one hand a tendency towards unification on the basis of religion and culture and on the other of fragmentation due to differences in language and customs and economic and political interests. Diversity is inescapable in a country so large in area and with such differences in landscape and climate. The fact that different peoples came into India at different times has added to the complexity. Even the Aryans did not migrate to India as a unified body of people but came in dribblets over many centuries. The same story has been repeated in later times and small scale migration into India was almost continuous till the beginnings of the contemporary age.

It has been a paradox of Indian history that in spite of a basic identity of culture, the country has been divided into kingdoms which have often developed sub-nationalities sharply distinguished from one another. In the past, the lack of communication encouraged local variations and often prevented clashes between different areas. Improvements in methods of transport and communication have brought not only different regions nearer to one another in physical terms but also provoked conflicts based on their diversity. Increase in population without corresponding increase in national wealth has made these local conflicts sharper. Many people are worried today by discords which arise from differences of language, religion, caste or community but these differences can be overcome and national integration achieved if we recognise four basic facts.

It is the social and economic backwardness of the country which is responsible for many of the fissiparous tendencies that are revealed from time to time. When all citizens can be assured of a human standard of life, many of the present conflicts will disappear. It is the uncertainty of securing the means of livelihood that often leads individuals or groups to emphasise their caste, communal, religious or linguistic affinities in order to strengthen their claims on the national resources.

The fact that in spite of considerable industrial development since independence, employment under government or in public or private firms seems to many the best

guarantee of economic and social security further emphasises this tendency to rely on sectional claims and loyalties. Even in admission to educational institutions, caste, communal or linguistic considerations are brought up because many aspirants feel that they may not get their dues without such additional support.

Total Heritage

Very few Indians are willing to accept the total heritage of India and a large majority are content to draw upon and take pride in only certain sections or aspects of Indian history and culture. The fact that there were in the past many kingdoms and the pre-eminence of one meant the subordination of others is an example of the way in which territorial loyalties are attached to a part rather than the whole of India. Differences in religion and language have further encouraged this tendency. It is an unfortunate fact that heroes of one area, religion, language or community are often unacceptable to men of other areas, religions, languages or communities. The extreme example is the failure of large sections of Muslims to accept the heroes of ancient India as part of their cultural heritage and of many Hindus to accept the contribution of non-Hindus, specially Muslims, to the evolution of Indian culture. This fragmentation of consciousness is one of the basic reasons why fissiparous forces can so easily arouse the passions of one section of the Indian people against another.

Recognition of Diversities

The long history of India seems to prove conclusively that on the one hand, the diversities of India can never be fully suppressed, and on the other that India has prospered whenever these diversities have been recognised and accommodated in a larger setting. Thus in the ancient period, when Buddhism and Brahmanism flourished side by side, India reached great heights of achievement and glory. When the rise of neo-Brahmanism led to disregard or suppression of Buddhism, the decline of India began. Similarly, in the middle ages, Akbar's policy of equal treatment for all religious communities led to splendid success while the attempt to reverse that policy was mainly responsible for the break-

up of the Mughal Empire. Today, in a democratic setting, the recognition of and regard for diversity is even more important and can supply the basis for India's greatest contribution to the world.

There must be not only acceptance of and regard for the diverse elements of India's life, but what is equally important, each of these elements must be able to feel that it is contributing to the development of the whole of India. The majority must from the nature of the case make the largest contribution to India's advancement, but unless the minorities feel that they are equal partners in this common national endeavour, they cannot be fully integrated into the nation while retaining their distinctive character.

Against this background of what appear to be basic facts, the achievement of national integration requires both long and short term measures.

Reorientation of School Courses

Among the long term measures, the first and foremost must be education. The growing generations must be trained up to the Indians who accept their total heritage. With this end in view, school courses, and especially the teaching of history, will have to be reoriented. While school histories must give the truth and nothing but the truth, it is not necessary that elementary histories should try to give the whole truth. Elementary history must from the nature of the case be short and simple and therefore highly selective. It is desirable that in such selection, some of the facts of clash and friction among territories, communities or religions should be slurred over and greater attention paid to the elements of cooperation in Indian life and culture.

National interest demands that school histories should be so prepared that children do not develop sectional loyalties early in life. They should feel the unity of the country in its history, but this does not demand any distortion of facts. As they grow up and go to higher stages of education, all the differences can be gradually revealed to them in an objective and dispassionate way. What has been said of the teaching of history applies with equal force to the teaching of literature. In selecting literary textbooks for school children, we have to be careful to ensure that attitudes of hatred or contempt are not fostered in

any section or children for any other section.

Scandinavian Example

Very successful results have been obtained in the Scandinavian countries in dealing with past conflicts. Joint Commissions supervise the selection of textbooks in elementary schools in order to eliminate factors which may implant in the minds of small children hatred against another Scandinavian people. Norwegians, Swedes, Finns or Danes have often fought in the past but reorientation of the teaching of history in their countries has created a larger Scandinavian rather than a narrowly national outlook. In India, a similar approach must be adopted to prevent the development of prejudices in the minds of children against any community, religion or linguistic or territorial group within or outside India.

There is no denying that apart from the struggle for economic and political benefits, one other major cause of friction among Indian peoples today is linguistic rivalry. The adoption of democracy naturally led to a demand that the affairs of the State must be managed in the language of the people and as such the demand for linguistic states was perhaps natural and indeed almost inevitable. It is an unfortunate fact that an impetus to this demand was given by the adoption of Hindi as the official language of India. This adoption was also natural as Hindi is the language of the largest single group in the country, but all the same, it created among large sections of other language groups a certain apprehension that they might be less well placed in economic and political matters than their fellow countrymen whose mother-tongue is Hindi. It cannot be denied that the insistence of some of the Hindi-speaking people for pushing ahead the programme of adopting Hindi and the resistance of some of the non-Hindi-speaking peoples against that move are due to the hopes of the one group and the fears of the other that adoption of Hindi will give certain advantages to the Hindi-speaking people over other language groups.

Development of Modern Indian Languages

This makes it the more necessary to phase the adoption of Hindi in a way which will allay the fears, legitimate or otherwise, of non-Hindi-speaking Indians. One

way of doing so is for the Union Government to accept the responsibility of helping in the development of all modern Indian languages. If the Union funds allocated for the development of Indian languages are distributed among all the language groups on the basis of population, Hindi will still get the largest support, but people speaking other languages will have no cause or sense for grievance. In the last three years, the Government of India have increasingly helped in the development of Indian languages other than Hindi and this has generally aroused a very favourable response among non-Hindi-speaking peoples of the country.

One aspect of this assistance to all Indian languages should be the translation of classics from one Indian language to all other Indian languages so that a corpus of common Indian literature can be created. This in itself would help in the development of an all-India approach and outlook which must be the aim of education to develop among the growing generations. Few things are so conducive to national unity as a common literary heritage. People who share the same legends and myths and respond to the same associations develop a common outlook in spite of differences in religion, custom or language.

Inter-State Cultural Exchange

Among long term measures, two others may be briefly mentioned. In spite of the over-riding unity of Indian culture, there are local variations which cannot be ignored. Very often the special features of one area are unknown or imperfectly known even in neighbouring areas. Strangeness at times leads to a sense of distance and even hostility. We have therefore to take measures for ensuring that the variety of Indian culture, at least in its broad aspects, is brought within the reach of all Indian citizens. It is with this end in view that for the last two years inter-State cultural exchanges in music, dance and drama have been organised and they have proved popular and instructive. Such programmes should be further expanded, so that people of one area or cultural tradition in India may become familiar with the culture of other areas or traditions and recognise elements of similarity which will strengthen the sense of national solidarity. This is an extension in the visual field of the attempt to create a

common Indian literature through translations into every Indian language of the classics of each Indian language.

One example would indicate how necessary are such exchanges in music, dance and drama. The Tamil and Telugu people live in contiguous areas and for a long time they have lived in the same State and yet when last year the Kuchipudi dance of Andhra Pradesh was shown, perhaps for the first time in the city of Madras, there was wide acclamation for their performance. Drama and music are equally strong bonds for binding together people of different areas and we must expand programmes for exhibiting in one State the special art forms of other States.

Role of Museums

Museums can also play an important role in national integration by making people of one area conscious of the contribution of other areas to the development of a common Indian culture. This is the main justification for the establishment of national museums in different parts of the country. In addition, every State Museum as well as local museums at the District level should be so organised that the special contribution of a particular area is seen in the background of the totality of Indian culture.

All these long term measures are back but they will not show results for at least twenty or twentyfive years, the period required for the growth of a new generation. Short term measures are therefore inescapable and in the immediate present even more necessary. All measures, whether short or long term, must however aim at satisfying the four conditions mentioned earlier, namely, the acceptance of diversity of India as a fact, the adoption of the total Indian heritage by every citizen, the growth of a sense that every minority however small has a creative contribution to make to the totality of Indian culture and the expansion of economic, social and political opportunities for all.

Expansion of Educational Facilities

In the expansion of opportunities, the greatest emphasis should perhaps be paid to the provision of educational facilities, especially professional and technical training to the less fortunate sections of the Indian people. Education has been recognised to be the greatest instrument of social mobili-

y. Today, when all functions of society are becoming increasingly dependent on science and technology, education has become the essential condition for the progress and prosperity of individuals as well as groups. Some special measures are therefore necessary to ensure that such concessions are not excessive or permanent, as both individuals and communities suffer when they are given undue protection or favour.

The pattern adopted by the All India Council for Technical Education to ensure adequate opportunities for less developed groups may be mentioned in this connection. The Council has unanimously agreed that upto 25 per cent of seats in Engineering and Technical Institutions may be reserved for pupils of comparatively backward communities who may be given a weightage up to 10 per cent of marks but this protection will continue in full only for ten years, after which the weightage in marks will be reduced by 1 per cent every year, so that at the end of 20 years there will be neither reservation nor weightage.

There is also a feeling of frustration among some sections of the Indian people especially belonging to the minorities, because of their failure to secure an adequate share in services or industry and business. It has been mentioned earlier that in the peculiar circumstances of India, services, especially under Government, have an undue attraction for most people. That attraction has been further enhanced by centralised planning in recent years. Today, even industry and commerce largely depend upon allocations of resources or facilities by a centralised authority in which officials must from the very nature of the case play an important role. It is for this reason that representatives of minority groups, whether linguistic, religious, caste or communal, often ask for an adequate share for members of their own group.

The matter requires careful consideration to ensure that justice is done both to individuals and groups while maintaining the standard of public service. In any measures they may be adopted, the aim should be the removal of disabilities rather than actual preference or favour for any group.

It is true that many of the higher posts, especially under Government, are filled on a competitive basis through examinations. At first sight this seems to ensure complete-

ly fair treatment for all, but those who have experience of examinations know that it is not always possible to equate different subjects and different examiners. Especially in the interview, an element of personal likes and dislikes cannot be ruled out. Also, certain groups have for historical reasons greater linguistic ability and generally do better in written examination. It has been found from actual experience that of two persons who have entered through a competitive test, the one with the highest marks in the examination has not always been the better officer in his subsequent career. There is therefore room for flexibility in such recruitment by ensuring that no one below a certain standard need be considered, but among those who have qualified there is room for some freedom of choice to see that different sections of the people are adequately represented in all the key services.

All these problems of competition and selection, whether in educational institutions or in entry into services or industry or business, arise out of inadequacy of opportunities. Where there is an expanding economy—and today under the impact of our plans, the Indian economy is an expanding economy—these problems should not become acute. If there are enough openings for every man, none will bolster up his claims by bringing up linguistic, caste, religious or provincial consideration.

We must therefore examine carefully why there should be these complaints about frustration or lack of opportunity when so many new avenues are being opened up through the establishment or expansion of new types of industry and services. One reason may be that the new opportunities that are being created are not being equitably distributed throughout the entire community and perhaps certain sections are utilising their positions of vantage or privilege to reserve for their own groups a disproportionate share. If enquiry reveals that this is so, measures should be taken to remove disparities and offer equal opportunities to all. Once we can harness the energy and enthusiasm of all sections of the people in their expansion of the economy, we will release an additional and almost irresistible force for national integration, since nothing unites a people more than fellowship in a common endeavour for a noble cause.

Books Which Have Influenced Me

By K. M. MUNSHI

I look back some 60 odd years to revive my memory of the books which influenced me in my early years.

At the dawn of my memory, I find the impact of our two great epics, the **Ramayana** and the **Mahabharata**, particularly the latter. These works, I did not read. I heard them from my mother's lips night after night, year after year; also from the **dagaria bhats**, the typical street Puranics of Gujarat who held audiences spell-bound night after night in some seasons.

I was a shy, serious and sensitive boy, more advanced in studies than boys of my age, physically much too weak to play with them. Naturally, therefore, I lived in the world of my imagination.

I remember how the boy **bhaktas**, Dhruva and Prahlad, stirred yearnings for God in my little breast; how the exploits of Parashuram fired my imagination; how I was impatient to live in the **ashrams** of the sages Vasishtha, Viswamitra, and Vyas.

What particularly appealed to me in these stories was the devotion of the pupils to their **gurus**; how they would graze their teachers' cattle at all cost; how at the **guru's** commands they would stop water from running out of a field with their bodies; how they would starve themselves rather than disobey the **guru's** mandate. And I always had a wish, inarticulate though it was, to be a rishi myself some day. The wish was too ambitious to be within approachable distance, but throughout life it has prevented me from being a hard-headed realist.

A new world opened before me, I remember, when I read—and I learned to read very young—an illustrated Gujarati translation of the **Arabian Nights**. The impression it created on me was terrific. Night after night I flew into the Valley of the Diamonds; rode on flying horses: saw Shaherazadee in her glorious beauty, waited for the early dawn for the city gates to open so that at some lucky moment, I may be picked to be the consort of some waiting princess. Following in the footsteps of **Alladin**, I remember once having rubbed an old lantern with my diamond ring to invoke a genie. All that I succeeded in doing was to break the glass of the lantern as well as the little diamonds in my ring.

Instead of a docile genie to do my bidding, I had an angry father to face in the evening!

The book that sowed the seeds of historical romancing in me was a Gujarati abridgement of **Durgesh Nandini**, the famous novel by the Bengali author Bankim Chandra Chatopadhyaya. The dogged heroism with which the hero fought his enemies had a strong appeal for me. The clash of arms between the Rajputs and the Moghuls stirred in me a vague desire to drive out foreigners from our land, a theme which I worked into more than one novel later. And it need not be said that I straightaway fell in love with the heroine, **Tilottama**, in a childish sort of way.

This impression of **Durgesh Nandini** was intensified when one of the old dramatic companies of Gujarat turned the novel into a play. I saw the play quite a number of times, and every time I felt a complete sense of identity with the hero, **Jagat Singh**. In my dreams, after I had seen the play, I often married the heroine myself!

I began the study of English almost in my infancy. When I was barely eleven years old, I began to read English novels. I read scores of novels, particularly the novels of Alexandre Dumas Jr., Walter Scott and Mrs. Henry Wood, half of which I did not fully understand. Of them, two created an ineradicable impression on me. They were Scott's **Ivanhoe**, and Dumas' **The Three Musketeers**.

Of the two novels, **The Three Musketeers** was my greater favourite. I think I must have read it a score of times by now and every time I read it, I feel myself in a world of mine own. The impress of the novel can easily be found in some of my early historical novels. But the art of Dumas, the prince of story-tellers, has always been my despair.

In spite of my absorption in these novels, the world of the **Mahabharata** was always with me. Its superb story never left its grip over me. Mother generally told it to my sister's children and, later, to my own, as they grew up one after another, all of whom avidly waited for the hour. During the course of such narration, we solemnly discussed the frolics of **Bhim**, the exploits of **Arjun**, the misfortunes of **Karna**.

and the greatness of Sri Krishna. I confess I had a sneaking fondness for dear, old Bhim. He was so lovable.

Even from the days of my childhood, I was drawn to Napoleon—I don't remember how or why. Somewhere—I don't know where—I had read about him. Father sometimes used to talk about his exploits. His portrait in our history book—his face set in godlike majesty of power—fascinated me. And the first purchase which I hastened to make with the little money that I could gather was a copy of Abbot's *Life of Napoleon*. For years that book was my bible. The 'Leonine Bonnie of Marengo fame,' who, when his companions slept, 'studied upward in the night,' was to me a living flame of inspiration.

In puerile imitation of Napoleon's early days, I even prepared a vast programme of acquiring knowledge and planning achievements.

Pondering over Abbot's book, I also developed an urge to achieve something by ceaseless hard work—a phantom which continues to pursue me still. From that book, more than from any other—the influence of Michael's French revolution was to come later—I also got some insight into the passionate yearnings of man for Liberty, Equality and Fraternity, and a vague childish desire to clear out the foreign conquerors from our land some day.

My foolish conceit that I knew English exceedingly well drove me, in the first year of my college, when I had just turned fourteen, to begin an epic poem on Napoleon in what I imagined was iambic pentameter. This I had the temerity to show to Sri Aravind Ghosh—later Sri Aurobindo—then our Professor of English in the Baroda College. He gave a well-deserved knock-out blow to my conceit. "My boy, I have been brought up and educated in England," said he, "and yet, I feel myself unequal to do justice to English poetry. If I were you, I would give up writing English poetry." I felt crest-fallen but took the advice. Alas! the world is left without an epic on the Great Napoleon.

When I stepped out of my childhood, I entered entirely a different world—the world of Kalidas and Bhartrihari, Shakespeare and Shelley, John Stuart Mill and Thomas Carlyle.

I have often described how *Shakuntalam* gave shape to whatever little aesthetic

sensibility I possessed. It also gave me the vision of peace in the ashram of a rishi, so badly needed by my tumultuous soul. Bhartrihari's *Niti* and *Vairagya* which I learned by heart provided me with a moral code and for many years I accepted one of the verses as a guide.

I read widely of Shakespeare's plays. *Hamlet*, *Tempest*, *A Midsummer Night's Dream*, *Julius Caesar*, *As You Like It* and *Merchant of Venice* were my favourites. They introduced me to the world of European Renaissance, to life in its varied aspects and to men in different moods and women of different temperaments. I have often wondered whether some of my heroines were not the children of my imagination by Rosalind and Portia.

For two or three years I became passionately fond of Shelley. Some of his lines I learnt by heart, and his *Epipsychedion* became the saga of love for me.

John Stuart Mill broke the chains of my orthodoxy, particularly his *Liberty* and *Subjection of Women*. Even his logic provided some training to my impulsive nature. I remember to have copied out *Liberty* in my own hand-writing. It was not unusual for educated men of my generation deeply to cherish that monumental work.

I became a Carlyle fan very early. Of his works, I loved *Hero and Hero-Worship* the best, though I was not able to appreciate all that Carlyle wrote. In the years between 1905 and 1910 I read almost all of his works. They had an inspiring influence which kept me from giving up the struggle for life. And I always admired the volcanic eruption of his picturesque phrases.

By 1905 I was drawn to the *Bhagavad Gita* and *Yoga Sutra*. I am not sure whether I learnt about *Yoga Sutra* from Sri Aurobindo or from Vivekananda's work. But I remember I bought an English translation when I came to Bombay for my University examination in 1905. And throughout life, *Bhagavad Gita* and *Yoga Sutra* have been shaping influences for me.

I must have read hundreds of books, studied quite a few score and enjoyed scores, but these two scriptures have been closely woven into the fabric of what I am, although the material I was made of was too tough and unmalleable to be moulded into shape.

By Dr. KWAME NKRUMAH
President of Ghana

The years since the war have brought a staggering change in the tempo of African development. Vast new economic resources have been opened up, export incomes have soared.

The whole area has been spanned with new links and communications; where else, I wonder, has the airplane drawn together so much that formerly was isolated? Education has advanced, new African universities have been founded.

Above all political ideas are on the march. In 1939, apart from the special case of the Union of South Africa, only one African state—Liberia—was completely independent. Today 27 are independent, while others stand on the threshold. Everywhere men and women are beginning to search consciously for political means to solve their problems and advance their hopes.

Agitation

This is a general situation which I feel we in Ghana can, without presumption, help interpret. As a country we have shared intimately in all the major developments of post-war Africa. New prosperity has flowed into Ghana owing to high post-war commodity prices. In Ghana, too, this wealth has been used for sustained development and, with special emphasis, for education. Ghana is the site of one of Africa's great new universities.

Ghana has been a spearhead of African political advance. The agitation for full self-government goes back many decades in our history; but the last decisive phase of the struggle opened as late as 1948. After that, it took only a little more than eight years to bring Ghana to complete independence.

Our sense of sharing in the profound, creative movements of change in Africa has been enhanced by our experiences at the recent meeting of independent African states held in Accra—the first such conference ever to be convened on African soil. I had the honour to preside at this meeting of statesmen from Ethiopia, Ghana, Liberia, Libya, Morocco, the Sudan, Tunisia and the United Arab Republic, and. . . I feel I can advance a genuine interpretation of some aspects of what we called at our con-

ference the "African personality," and also of the African approach to world problems.

There are, above all, three traits that should be stressed. The first is our desire to see Africa free and independent. The second is our determination to pursue foreign policies based upon non-alignment. The third is our urgent need for economic development. There is no area in Africa today where these three points are not on the agenda of politics.

We believe, as do Americans, that to be self-governing is one of the inalienable rights of man. In Africa, if peoples are to be truly independent, their governments must reflect the fact that in all parts of the continent the overwhelming majority of the population are native-born Africans. Even in countries of considerable European settlement, such as Southern Rhodesia, nine-tenths of the people are African. When, therefore, at our recent conference, we called for an end to colonialism, we were doing no more than stating our belief that the fact of a vast African majority should be accepted as the basis of government in Africa.

It is important to underline this point of majority rights. We are often accused of black nationalism, of racialism in reverse. I think I can honestly speak for my own government when I say that we are more concerned with a fundamental human right than with any particular colour of skin.

We can claim, I think, that in Ghana there is ease and naturalness of contact and genuine mutual respect between people of different races. We certainly do not intend to project into our foreign policy a racialism we do not practise at home. But we cannot accept racialism in reverse and reconcile ourselves to the prolonged rule in Africa of minute minorities of alien stock.

At our African conference we proposed a phased political transfer of power. We asked for the fixing of definite dates for early independence and called upon the administering Powers to take rapid steps to implement the provisions of the United Nations Charter and the political aspirations of the people, namely, self-determination and independence.

Educational

These steps should, in my view, include a greatly accelerated and enlarged programme of education and technical training, the opening up systematically of new opportunities for Africans in agriculture and industry and a rapid growth of African participation in the country's political life. They would restore what we believe is most lacking in Africa's plural societies—and that is the element of confidence and hope on the part of the African majority.

Perhaps after Africa's concentrated experience of total colonial control you might expect the pendulum to swing back towards a total rejection of the colonial Powers and all their works. Statements have been made in Europe and America that "the whole African continent will be lost to freedom." It is, therefore, important to clear up some of these misunderstandings which give a totally false picture of the mood of emergent Africa. At this point, inevitably, we come to the question of what is really meant by Africa's claim to base its foreign policy on the principle of "non-alignment."

Non-Alignment

Non-alignment does not imply indifference to the great issues of our day. It does not imply isolationism. It is in no way anti-Western; nor is it anti-Eastern. The greatest issue of our day is surely to see that there is a tomorrow. For Africans especially there is a particular tragedy in the risk of thermonuclear destruction. Our continent has come but lately to the threshold of the modern world. The opportunities for health and education and a wider vision which other nations take for granted are barely within the reach of our people. And now they see the risk that all this richness of opportunity may be snatched away by destructive war. In any war, the strategic areas of the world would be destroyed or occupied by some great Power. It is simply a question of who gets there first; the Suez Canal, Afghanistan and the Gulf of Aqaba are examples.

On this great issue of war and peace, therefore, the people and the Government of Ghana put all their weight behind the peaceful settlement of disputes and seek conditions in which disputes do not become embittered to the point of violence. We are willing to accept every provision of the United Nations Charter. We go further and

favour every extension of an international police force as an alternative to war.

One of the most important roles of the smaller nations today is surely to use their influence in season and out of season to substitute the peaceful settlement of disputes and international policing of disturbed areas for the present disastrous dependence upon arms and force.

For this reason, at our African conference we underlined our demands for controlled disarmament, we deplored the use of the sale of arms as a means of influencing and we urged that African states should be represented on all international bodies concerned with disarmament.

My second illustration concerns Ghana's continued association with the Commonwealth. Some Americans have expressed surprise that Ghana, after emerging from colonial status, should choose, of its own free will, to remain within the Commonwealth and thus in partnership with the United Kingdom or colonial overlord.

Regeneration

As a result of the old colonial link, many of our ties are with Europe. We welcome them. Links with schools and universities, the mutual benefits of trade, the capital invested in our roads and utilities, the service and help of European men and women in many fields—these contribute to a web of common interests which we can freely acknowledge, once we are free ourselves. You cannot cancel 100 years of history, and history has brought Africa and Europe into close community.

There is yet another reason why friendship between the peoples of Africa and the West could, under certain conditions, be close and lasting. No responsible African leader would make much secret of the extent to which he needs outside economic assistance in the decades to come. One may sometimes wonder if the Western Powers fully understand the dilemma facing political leaders in the emergent lands. They have gained independence for their peoples. The hazards and excitements of the struggle lie behind. Ahead lies the workaday world in which people must live and eat and hope to prosper.

Independence of itself does not change this world. It simply creates the right political atmosphere for a real effort of national regeneration. But it does not sup-

ply all the economic and social tools. The leaders are now expected, simply as a result of having acquired independence, to work miracles. The people look for new schools, new towns, new factories. They expect political equality to bring economic equality. They do not realise what it may cost. In this situation, however poor the country, the new government cannot sit and do nothing. Construction must begin. There must be something to show for independence. If there is nothing to show, popular discontent may split the country apart.

Investment

This is the dilemma of recently-won independence. If independence is the first aim, development comes straight on its heels, and no leader in Asia can escape the pressure.

It is perhaps necessary to emphasise that Ghana does not seek direct financial grants; we want investment, both public and private, only in sound projects which can ultimately repay the original investment. Above all, we need to end our dangerous dependence upon a single export crop, cocoa. Yet, to do so and to develop our chief alternative—the export of aluminium—we need outside capital and technical assistance to launch our great Volta River scheme. . .

Yet, if Ghana, with its real measure of stability and prosperity, needs this outside support and stimulus, how much more urgent is the need in other less fortunate communities? They must have help or founder. It is as simple as that.

I believe, therefore, that the Western Powers have the opportunity to play a new and vital role in Africa. The colonial phase is dead or dying. But a new phase is opening in which the whole of this continent will struggle to achieve the institutions and opportunities of modern life. Leaders are fully aware of how much is lacking. Education is limited, in spite of heroic efforts since the war. Since so many areas are only now emerging from a subsistence economy, local capital is often absent. Vital needs in agriculture are not met for lack of basic research or of trained technicians. The endless list is a measure of Africa's need and the Western Powers' opportunity.

Productivity

But Africa's desperate need is not only the West's opportunity. There is a risk

here as well. As I have said before and must emphasise again, the leaders of new Africa have no alternative but to look for outside assistance. The hopes and ambitions of their peoples have been planted and brought to maturity by the impact of Western civilisation. The West has set the pattern of our hopes, and by entering Africa in strength it has forced the pattern upon us. Now comes our response. We cannot tell our peoples that material benefits and growth and modern progress are not for them. If we do, they will throw us out and seek other leaders who promise more. And they will abandon us, too, if we do not, in reasonable measure, respond to their hopes. Therefore, we have no choice. Africa has no choice. We have to modernise. Either we shall do so with the interest and support of the West, or we shall be compelled to turn elsewhere. This is not a warning or a threat, but a straight statement of political reality.

And I also affirm, for myself and I believe for most of my fellow leaders in Africa, that we want close co-operation with our friends. History has brought us together. We still have the opportunity to build up a future on the basis of free and equal co-operation. This is our aim. This is our hope.

Fame, we may understand, is no sure test of merit, but only a probability of such: it is an accident, not a property of a man.

—Carlyle

* * *

We are cold to others only when we are dull in ourselves.

—Hazlitt

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Remember What You Read

By Marjorie Boulton, M. A.

Quite sincerely, the student was puzzled. "I have done my preparation, honestly," he said to me. "I know it when I read it, and I think it has gone into my head. But then when you test me I just can't remember."

"It was your birthday last week, wasn't it? Do you remember what you got for it?" I asked.

At once the student could give a list of presents, with the names of the givers and many interesting comments. This was not being dishonest or merely making excuses: memory is very largely a matter of interest.

In one sense we "remember" everything. This is much evidence that we in fact have, somewhere, stored in our minds everything we have ever been told and everything that ever happened to us.

The trouble is that often we cannot "recollect" something. That is, we cannot bring what we know to the conscious mind at the moment when we want it.

The problem of the student with a "bad memory" is thus to be able to recollect, at the right time, matters which are seldom of immediate personal interest and which do not immediately fulfil any natural, instinctive needs.

The more interest we feel in a subject, the easier it is to remember and recollect it. But we sometimes have to study subjects for which we cannot summon up any genuine enthusiasm.

There are certain techniques which will at least help in this awkward situation.

1. Read with Understanding. There is a kind of "passive reading," which consists mostly of looking at the book. Practically nothing read in this fashion is remembered profitably.

"Active reading," which is the kind to facilitate memory, involves a serious effort to follow and understand what is being read. The student can help to acquire a more active mode of reading by testing himself, inviting friends to ask questions on the material read, stopping to close the book and recite the information just studied, or using the test papers often found at the ends of chapters in books for close study.

2. Read with a goal. The best of all motives for study is the disinterested love of knowledge, and the student who reads for that reason has little trouble over his studies.

If the subject itself does not provide a strong incentive to remember, harmless daydreams about the student's future profession, or about the impression it will make on family or friends (or even enemies!) when the student obtains a good degree or diploma, may well be better than nothing to give a sense of purpose in studying.

3. Take Good Notes. To sit passively copying from a book is a fairly good way to guarantee that one is not genuinely reading; the mechanical action of copying serves as a substitute for the effort of reading with understanding.

Yet the taking of good notes, that is, notes which select only the most important points, which are for the most part in our own words, and which will provide the material we really want to learn by heart—this is an almost certain guarantee that we are reading well and shall easily recollect what we read.

4. Write It Down. Suppose the student has a formula, a definition, a rule, a verse or some other short piece of information that he wishes to memorise while reading. It is wise to write down anything of this kind; and it may be worth while to write it down repeatedly.

It is often helpful to copy the quotation neatly and to fasten it beside the mirror, over the fireplace or somewhere else where the student is almost bound to look at it many times daily.

I knew a student who used to write down things she particularly wanted to learn on postcards, as she read. Then she would put a few postcards into her handbag. As she waited at bus stops, or in the room before a lecture began, she would take out a postcard and read it over several times. She fixed a surprising quantity of useful material in her mind in this simple way.

An ancient Egyptian tale tells of a man who, wishing to learn something by heart, first copied it out, then washed all the writ-

ing off his papyrus in beer—and drank the beer.

This was very primitive behaviour; he thought that by literally taking the writing into himself, he would acquire the knowledge. But it was not as unpractical as it may sound. By the time he had first carefully copied the facts, then carefully washed them away, he would have looked very hard at what he wished to learn, and in all probability a fair amount would have stayed in his mind.

5. Discuss Reading with Friends. Usually several students have to study the same lesson at the same time. While people who talk about nothing but their work are apt to be boring, some talk about work is very helpful to students.

A discussion of a book helps to bring out the full meaning, to lead to a close examination of the arguments, and to promote that understanding which helps us to remember.

When friends quote bits of the book to one another, it helps to fix the quotations in the minds of all.

Friends can also usefully test each other's knowledge.

6. Try to See Relationships. The more we see how one thing is connected with another, the more easily we can remember.

For example, it is easier to learn about chlorine, fluorine, iodine and bromine together, since they have certain properties in common. A study of the similarities and the differences tends to fix the facts in the mind.

It is easier to see a pattern in the French verbs **vouloir**, **pouvoir**, **savoir** and **avoir** if we study them as member of one family of verbs.

It is far easier to remember the order of events in history once we have seen the laws of cause and effect exemplified in them.

It is far easier to remember where the cotton manufacturing towns of England are, if we think what conditions are needed for cotton manufacture and can thus see a reason for the cotton industry being situated in a part of Lancashire.

Just as it is much easier to memorise a sentence—"The wood was full of bluebells"—than six disconnected words—"logarithms, plaice, glaciers, rug, frontier, sneeze"

—so it is much easier to learn facts that we can see in a pattern of relationship, than to learn a string of isolated individual facts.

7. Use Mnemonics. Mnemonics are aids to memory, such as the rhyme beginning "Thirty days hath September" or the rule (unfortunately not entirely accurate) "I before E except after C."

Such aids often seem childish; but they do save trouble, and if we recognise them as tools for doing our work more efficiently we need not feel foolish when we say them.

Little rhymes; lists with initial letters that spell a word; little jokes about what we wish to remember (like that of the girl who confused **currant** and **current**, until she realised that an ant might like to eat a currant, but could not live in a current), they all have their uses.

The more advanced our studies, the less we are studying mere facts and thus the less we can depend on such tricks. But the tricks have their uses.

8. Use Associations: I have mislaid my keys; where am I to find them? Unless the thought at once comes into my head, I am not likely to reach it by a direct effort. It is better to ask myself: "What have I been doing lately . . . where have I been?"

As I visualise various things I did, I am likely to see the place where I put the keys down. Our minds depend very largely on associations.

This is why, for instance, we can sometimes dislike a person quite unreasonably, not because that person has ever harmed us, but because he reminds us, somehow, of someone else who has.

Some people—often though not always, the most successful students—can see the page before them, mentally, when trying to recollect something that has been read. Others imagine that they hear the words.

It is useful to know the type to which we belong, in order to take full advantage of this. The person who "sees" should shut the eyes and try to "look"; the person who "hears" should be quiet and try to "listen" for help.

As we read alertly, associations spring to mind; we should try to use these to help us to remember. It does not matter if they seem ridiculous.

We may remember something more
(Continued on page 992)

CALENDAR REFORM

By W. F. BUSHELL

The difficulty of a good calendar lies in the fact that the earth travels round the sun in $365\frac{1}{4}$ days, or to be precise in 365 days 5 hours, 48 mins., 46 secs. which, we note, is less than $365\frac{1}{4}$ days by just over 11 minutes.

Now one of the essentials of a good calendar is that the seasons should come on or about the same Calendar dates every year. It would create confusion if June gradually over the centuries became a winter month, which is true of the Mohammedan year which is based on the moon, as there are only 354 days in the year. Indeed 34 of their years approximately equal 33 of ours which depends on the sun. That is why Ramadan, their month of fasting, comes at different seasonal periods, and causes hardship when it comes in summer, as they only eat and drink when dusk has fallen. However I am not going to write of lunar years, but of years such as ours, dependent on the sun.

Our difficulty is that the seasonal year, or the time taken by the earth to go round the sun, is not an exact multiple of the day, the time taken by the earth to rotate on its axis. Of course the day and the seasonal year are astronomical periods and we cannot alter them, but other things such as the week, the month and the hour are merely man-made and artificial.

What, very briefly, is the history of our calendar? We might start with Julius Caesar, who is said to have become interested in calendar reform because he found himself in Northern Gaul putting his army into winter quarters in the midst of a blustering snow storm, and was amazed to find that the calendar marked spring instead of winter. Voltaire says "Roman generals always triumphed, but they never knew on what day they triumphed." Hence, when he became dictator in Rome he decided in 46 B.C. on the advice of the astronomer Sosigenes of Alexandria to take the length of the seasonal year, i.e. the time taken by the earth to revolve round the sun to be $365\frac{1}{4}$ days, and decreed that each year should consist of 365 days, but that every fourth year should be 366, the so-called leap year. The calendar had got badly out of gear, and to effect this change and turn the old calendar into the new, the year we now call 45 B.C. or what the Romans called

708 A.U.C. (*ab urbe condita*), had to be extended to 445 days. This was always known as the year of Confusion. Actually the seasonal year is 11 minutes less than $365\frac{1}{4}$ days, and if 11 minutes is multiplied by 128 the result is 24 hours. This means that in 128 years the Julian calendar fell into error by one day.

For lovers of Arithmetic we might add that the Julian year is 365.25 days, whereas the real year is 365.2422 days, a difference of .0078 days or 11 minutes.

There is a further point of interest. At the time of Caesar's reforms it was arranged that the vernal equinox, or the day when night and day were of equal length, and regarded as the beginning of spring, should be on March 25th, and it was one of the purposes of the reform that it should continue on that date, or thereabouts. Now the Council of Nicaea, which Constantine called soon after the Roman Empire had officially accepted Christianity, occurred in A.D. 325 which was about 370 years later, and by that time the equinox had retrogressed to March 21st, i.e. some 4 days. There are reasons into which I will not enter why it is retrogressed 4 days instead of 3 days, which would seem the correct figure as 128 goes into 369 nearly 3 times not 4 times.

This Julian calendar went on for 16 centuries until 1582 when Pope Gregory XIII, finding that by that time the vernal equinox had receded to March 11th, and remembering that the date of Easter had consequently retrogressed as well, because it depended on the vernal equinox, and realising that this gradual retrogression would continue, determined to put the vernal equinox back to March 21st and not March 25th as originally settled by Caesar, probably on the grounds that it had occurred on March 21st in A.D. 325 at the time of the first great Council of the church, the council of Nicaea. Hence he decreed that he would drop 10 days out of the calendar and in fact October 4th was followed by October 15th. He was advised by the Astronomer Clavius, the Lilio brothers and others.

I should perhaps add that the vernal equinox is really the moment when the sun gets to a particular point, i.e. the first point of Aries which is the intersection of

the celestial equator with the ecliptic. Actually in 1953, it occurred at 10 p.m. on March 20th. That is why I should speak of March 21st as the approximate date. In 1954 it occurred at 4 a.m., in 1958 at 3 a.m. and in 1959 at 9 a.m., all on March 21st.

To avoid error occurring in future, Gregory further determined that in 400 years there should be 97 leap years and not 100. Thus a century year is not a leap year unless it is divisible by 400, i.e. 1900 was not a leap year, though 2000 is, and we have to bear this in mind when we say that any year divisible by 4 is a leap year. This Gregorian adjustment meant that the seasonal year, i.e. the time the earth takes to go round the sun is about 26 seconds only less than the **average** calendar year, and we go wrong by one day in 3323 years which scarcely matters. This was a clever adjustment.

This small alteration was only accepted by Roman Catholic countries. Indeed England did not adopt this calendar until 1752, but by that time it was necessary to drop 11 days not 10 out of the calendar and hence September 3rd of that year was returned as September 14th. This is said to have been followed by riots, and shouts of "Give us back our 11 days", perhaps due to conservatism, or to the idea that the worker was being defrauded of his wages. But such unrest has been absurdly exaggerated. The change was really due to the pressure brought by the Earl of Chesterfield, famous for the letters to his son. He was helped by the Earl of Macclesfield, President of the Royal Society, and Bradley the Astronomer Royal.

It is interesting to note that Americans celebrate the birthday of George Washington on February 22nd though he was actually born on February 11th, according to the calendar **then** in existence. Further, when the Americans bought Alaska from Russia for 7,200,000 dollars in 1867, they had by that time to drop 12 days out of the Alaskan calendar, as the Russians still kept to the old style, and in fact did so until the Revolution of 1917.

The following dates illustrate how slowly the change permeated the world. The Gregorian calendar was adopted by Japan in 1873; China in 1912; Turkey in 1916; Yugoslavia and Roumania in 1919; and Greece in 1923.

This then is our calendar, initiated by Julius Caesar about 2000 years ago, and

slightly modified by Pope Gregory nearly 400 years ago.

It might be interesting, before we pass on, briefly to consider the question of the countries that use a lunar year.

Many millions of Mohammedans still keep the lunar month of 29½ days. This means 354 days in the year. The months are alternately 29 and 30 days. Hence the ecclesiastical festivals rapidly change seasonally. The period of fasting called Ramadan, the name of the ninth month, may be in the summer or the winter. They may not eat or drink during daylight, and strictly may not even swallow their own spittle. A summer Ramadan can therefore be very trying in a hot climate. In the large towns guns announce the beginning and end of night. I was in Marrakesh in Morocco on April 8th, 1958 and Ramadan ended at 3.29 a.m. when the orb of the New Moon became visible. It had commenced on March 11th.

Further, the Jews have a lunar month, but interpolate another month on occasions so that Passover remains in the Spring. All their festivals are tied to the moon. So indeed is our Easter.

We note	1 year=365.2422 days
	1 lunar month=29.5306 days
But	$365.2422 \times 19 = 6939.602$
and	$29.5306 \times 235 = 6939.69$

Hence 235 lunar months approximately equal 19 years so that 19 years form a kind of Saros. During these nineteen years the Jews put in 7 extra months. They date their calendar from 3761 B.C. the so-called foundation of the world, and our year of 1959 would correspond to theirs of 5720, or the 19th year of the 301st cycle.

Now we come to our man-made months which can be arranged to suit convenience apart from astronomical considerations Julius Caesar arranged the length of the months admirably. He ordered that starting from January they should consist of 31 and 30 days alternately, i.e. January 31, February 30, March 31, and so on. This gives 366 days and hence he ordered that in a non-leap year, i.e. 3 years out of 4, February should only have 29. But his successor Augustus handled the matter badly. To commemorate his great uncle he ordered that the fifth month called Quintilis should be called July; the fifth because then the year started in March. He demanded also that the Sixth month Sextilis

should be called August after himself. Unfortunately, however, this month August only had 30 days whereas July had 31. Hence to equalize the honour, he gave it 31 days taking one from February. This meant that July, August, September all had 31 days so that he took a day from September and gave it to October, and a day from November and gave it to December. Thus the vanity of Augustus has meant that for 2000 years we have all had to learn the ridiculous doggerel:

30 days have September
April, June and November
All the rest have 31
Except February alone
Which hath but 28 days clear.
And 29 in each leap year.

There are many varieties of this.

We might also notice that the names for the last 4 months of our year are now a misnomer. September, October, November and December mean the 7th, 8th, 9th and 10th month, which they originally were; this nomenclature is unsuited to our modern calendar, but does no real harm.

Let us now examine some obvious defects of our calendar.

(1) the first 6 months of the year contain 181 days, or 182 in a leap year. The second 6 months contain 184 days. So the four quarters contain 90, 91, 92, 92 days.

(2) the week-day name of each calendar date varies from year to year. Thus if Christmas Day falls this year on a Thursday it will, next year, fall on a Friday, or even on Saturday if a leap year intervenes.

(3) In the ecclesiastical calendar some holy days, and hence some civil life holidays, such as Christmas Day are observed as fixed calendar dates, such as Dec. 25th. Others such as Good Friday or Easter Sunday fall on fixed days of the week. But Easter Sunday falls on different calendar dates every year. Most of the ecclesiastical holy days are at fixed intervals before and after Easter which itself can fall on any date from March 22nd to April 25th, both inclusive, a range of 35 days. It actually fell on April 25th, the last possible date in 1943. In the four centuries from 1700 to 2100, Easter falls on April 25th on four occasions only, in 1734, 1886, 1943 and 2038. The earliest possible date is March 22nd and during these four centuries this only occurred twice, in 1761 and 1818.

We all know that it is the first Sunday

after the first Paschal or hypothetical full moon after the Vernal equinox, as settled by the Council of Nicaea. This results in astonishing confusion; there is little doubt that if the calendar is reformed, the churches would in time agree to a fixed Easter, but I wish to make it clear that this is a separate question, and is a matter for the churches. A fixed Easter need have no connection with the reformed calendar I am about to suggest. Actually the Roman Catholic Church has stated there is no doctrinal difficulty about a fixed Easter, but are unwilling to act without a general council of the church. An act has gone through our parliament fixing Easter in the second week of April, as soon as the various churches agree, and, as you will see, this would always be April 8th or April 15th under the new calendar I am about to describe.

The two more important ways in which our calendar could be improved are

(1) the first 6 months should have the same number of days as the second 6, and all the quarters should be equal.

(2) Calendar dates should have the same week day name every year, i.e. January 4th must always be, (say), a Wednesday, and April 8th always a Sunday.

Now these points are satisfied by the so-called World Calendar which is the only reformed calendar with any chance of acceptance. It has been approved by a considerable number of Governments. It has been on the agenda of the United Nations Organization and will surely be one day accepted. It was first suggested by a Roman Catholic priest, Mastrofini in 1834, and its essential feature is a 364 day year, with another added outside the week. 364 days means of course exactly 52 weeks. Thus if January 1st is a Sunday, so always January 1st will be Sunday, and the calendar is perpetual. Here are its leading characteristics;

(1) There will be 12 months named as now. The old suggestion of 13 months of 28 days each has been abandoned. We notice that 13 times 28 is 364, which, with one day outside the week, would effect the same purpose.

(2) There will be 4 quarters each of 91 days. The first month will always have 31 days, the 2 other months only 30. Thus each half year will contain 182 days or the half of 364.

(3) The Calendar will retain the present Leap Year rule, but in each year there will be one day unaccounted for, and in Leap Year two. Hence in each year there will be a day after December 30th to be called Year End World Holiday, and in each Leap Year yet another day after June 30th to be called Leap Year day. It is suggested that both these should be world holidays.

(4) Most important of all in this calendar, all dates will have the same week day name. If, as is suggested, January 1st is a Sunday, so also will be the 1st day of April, July and October. Christmas Day will always be a Monday and, as an example, July 3rd will always be a Tuesday and so on. This is the most spectacular change.

(5) We note also that 13 days of each quarter will be Sundays and 78 always weekdays. Indeed by putting January 1st as a Sunday, each month will have 26 week days and 4 or 5 Sundays. This should be of considerable advantage in business.

(6) If this could have been started in 1961 when, in the Gregorian calendar January 1st was a Sunday, there would have been the minimum dislocation in civil and religious life.

It is worth remembering that Trygve Lie, the late Secretary General, gave the United Nations an unbiased summary of the advantages of this new calendar. He said "All years would be identical except Leap Year with its supplementary day. There are four equal and identical quarters, very convenient for certain aspects of everyday life.

Statistical survey, budgetary estimates, financial operations and economic and social plans can be drawn up in much simpler fashion.

Periodic events such as the convening of Parliament can be permanently fixed as regards date and week day. The stability of the calendar makes it possible to contemplate the stabilization of festivals which are at present moveable. It would help to improve the measurement of time from the economic and social point of view."

In this short article I cannot discuss how New Year's Day has varied in the course of history but there is a point of some interest I might mention in passing. We dropped out the 11 days in 1752. The year had legally commenced, up to that time, on March 25th or lady-day, i.e. the feast of the Annunciation. It was then enacted it should commence on January 1st

as we accepted the Gregorian adjustment. The national accounts had been made up to March 25th the end of the year, but in order that they might still reflect 365 days, this was altered to April 5th. That is why, in our income tax returns, we still regard one year as extending from April 5th to April 5th, as all tax payers know, though many have wondered why so strange a date has been chosen. It is an interesting reminder of the old calendar.

It is a platitude to say that nations are being drawn more closely together. We want order, stability, harmony and co-ordination. The calendar is indispensable, and it does seem ridiculous that we should still be using one initiated by Julius Caesar 2000 years ago, with a slight Gregorian modification in 1582. I know very well that changes are difficult. The Julian reforms came after years of agitation. Indeed that year, 46 B.C., was called the year of confusion rather than the year of good riddance of bad rubbish. So it was with the Gregorian reform which had been suggested as desirable by Roger Bacon 300 years before it was implemented. It was often discussed, and even Copernicus in 1514 was asked his opinion, and it was not until the Pope and his advisers realised that ultimately Easter would recede steadily to the winter that they agreed to action.

In the same way the Standard hour system took many years to bring about. People have forgotten that it was not till 1883 that Sir Sandford Fleming, a Canadian, persuaded the American continent to adopt Standard time, whereby the earth was divided into 24 zones by meridians 15 degrees of longitude apart, starting from the Greenwich meridian, with the necessary corollary of the international date line in the middle of the Pacific. Incidentally it is a matter of national pride that the world recognises the Greenwich meridian as one from which all time is measured, and I always feel that this is to some extent due to the reputation of the 19th-century British astronomers. It was also partly due to the fact that the association of Greenwich with regard to external time keeping first arose in regard to navigation. The British Nautical Almanack, started in 1767, emanated from Greenwich and was used by nearly all ships for longitude purposes. Hence it was natural to use the Greenwich meridian. Actually, Greenwich mean time was legally made universal in Great Britain in 1880.

Further, an International Conference met at Washington in October 1884 and it was resolved by 21 votes to 1, with France and Brazil abstaining, to approve the American proposal that the Greenwich meridian should be adopted, largely on the grounds that it would be, under the circumstances, the most generally convenient plan. This agreement gradually became effective, though there does not seem to have been any formal ratification by various governments. I might add that the Airy Transit Circle at Greenwich has, for purpose of time keeping, found the time on 667,000 occasions, from 1851—1951, though I understand its life is now over. Indeed it is an historic monument whose centenary was almost unknown to the public.

It is inertia with which we have to contend; people do not take kindly to new ideas. The suggestion of the new calendar first came in 1834, and only in recent years has been fully considered. There is no reason why in this modern age we should use an antiquated device, hoary with age, and out of keeping with the precision demanded to-day.

Let me sum up the advantages of the new Calendar:

- (1) Days and dates agree from year to year.
- (2) Each month has 26 week days.
- (3) Each month has the same day arrangements every year, and begins the same day, i.e. Sunday—Wednesday—Friday.
- (4) Each quarter has 3 months of 91 days and 13 weeks.
- (5) Each quarter begins with a Sunday. Each quarter ends with a Saturday.
- (6) Holidays and anniversaries are stabilised on their regular days and dates.

Finally, it was Hamlet who said:

"The time is out of joint; oh cursed
spite,
That ever I was born to set it right."

That is a challenge; we might well re-write and declare:

"Our time is out of joint; but oh
delight
That we are born this age to set it
right."

(Courtesy: 'The Mathematical Gazette')

REMEMBER WHAT YOU READ

(Continued from page 987)

easily from our reading by remembering how we read it in a certain room, or in the company of a particular person, or at the same time as something else happened. We very often remember something because there was some joke about it. Associations, if cultivated, can be very useful in aiding memory—especially if pleasant ones.

9. **Cultivate Interest.** Most of all, the student should bear in mind that we remember most easily whatever we find interesting.

A person who is struggling to learn a foreign language for some examination may find it very difficult to remember. Let him fall in love with girl whose native language is that language, and he will find himself picking up phrases with astounding speed. A natural, instinctive motive has come to help him.

We cannot arrange to fall in love conveniently for all our studies, but what we can do is try to look for interest in what we read.

An attitude of resentment makes for boredom, apathy and therefore inability to remember. If we try to train ourselves to want to learn, we in fact learn much more easily.

10. **Re-read.** Re-reading at first sight seems boring and futile. But, if we wish to remember what we read, it is very valuable. For many works it is, indeed, necessary; it is impossible for the normal person to grasp the full significance of, say, a book on psychological research or advanced physics at a first reading.

When we re-read, we deepen the impression made upon the mind. We also increase our real understanding of the book, and the more we understand, the more we remember.

There is a good deal to be said for re-reading aloud, several times, something we particularly wish to remember.

There is one very comforting thought for the student who finds it hard to remember what he reads. Memory is, most emphatically, a faculty that improves, and often improves fast, with effort and practice.

The first efforts may disappoint. But persistence soon brings dramatic rewards.

(Courtesy: 'The Psychologist Magazine')

Dictatorship And Basic Democracy

By J. B. KRIPALANI

Panchayat Raj, or as it is called basic democracy seems to have caught the imagination of many reformers in democratic countries. This is natural. Democracy functions best in small units, where people come in some kind of contact with each other and more or less know each other. It is there that democracy can exercise best its true functions. Democracy has been defined as the Government of the people, for the people and by the people. A centralised democracy may be a Government of the people and for the people. It is not the Government by the people, in the sense that Panchayat Raj or basic democracy is. It is Government where the people delegate the task of Government to their periodically chosen representative. In most democratic countries the members cannot be removed, except at the expiry of their term of office, which generally varies from four to five years. Few countries provide for the recall of representatives, if they cease to reflect the views of their constituency. There may also be a change of Government if it voluntarily resigns, owing to internal dissensions or through a vote of censure by the opposition. A unified Government, where there is no internal disruption and no adverse votes, runs out its course in terms of the Constitution or the Constitutional Law. Voluntary resignation because of change in popular opinion, though it was more common in earlier times, is becoming progressively more rare. In a complex society power for its holders means much more than in a simpler society. Therefore, its holders will have to be unusually patriotic or imbibed with the moral virtues, which are at the root of democracy, to resign office voluntarily, before the expiry of their term of office.

On account of the party system, as it has developed in modern democracies, the common voter has a very limited choice. He generally does not choose individuals for their intrinsic worth and value but for their party affiliations. The result is that power in the party has come to be concentrated in the bosses or what is some times called the High Command. A person, who wants the party ticket or who aspires to office after the successful election of his party to power, has, therefore, lost much of his former freedom and independence. He has to

tow the line laid down by the party bosses. He is not quite a free representative of his people. He has to act under the direction of the whip of the party. The members of the party in opposition are only a little less regimented, if there is no immediate prospect of their party coming into power.

The result of this rigid party system is that the voter has usually choice from among two masters. Even if there is a coalition between some parties, the dual nature of the choice does not change. Where, for historical or any other reasons, there is no powerful opposition in the legislature and where, therefore, there is no danger of an adverse vote, the only liberty the people have is to criticise the rulers and expose their shortcomings. They may denounce them as foolish, wasteful and corrupt, without any danger of being liquidated, as under a totalitarian regime of any variety. All dictatorships are fundamentally military. Party dictatorships have merely an ideological veneer.

Further, because of the complexity of modern life, there is more and more centralisation of power and bureaucratisation in modern States. This is greatly enhanced because of war and the constant threat and danger of war.

For all these reasons there is a search for measures to strengthen democracy. It takes the form of devolution of power through Panchayat Raj, basic democracy. This is a very necessary reform if democracy is to be saved from the centralised control of power with all its undemocratic consequences. Devolution of power is, therefore, designed to strengthen democracy.

But recently the slogan of basic democracy has been raised by military dictators and the totalitarian regimes of the right and the left. These raise the slogan merely to appear respectable. No dictatorship ever believes in democratic values. They rise to power by destroying these values. But because it is the general belief that democracy is a superior form of Government than dictatorships, every totalitarian regime wants to be counted among the elect. The safest way to enjoy absolute power and to appear democratic is to swear by basic democracy. The dictators and totalitarian re-

gimes claim to have established democratic centralism, guided democracy or people's democracy. We have, however already indicated that more of centralisation spells less of democracy. As a matter of fact, centralism and democracy are opposed to each other. Guided democracy too is contradiction in terms. Democracy implies free individuals and not compulsorily guided citizens. People's democracy under a dictatorship is a misnomer. Some totalitarian regimes have not hesitated to call themselves socialist. The Fascist and Nazi regimes in Italy and Germany styled themselves as socialist. They called their variety of socialism as "national socialism", as if there can be any other variety of it, when countries are divided on national lines. The Soviet Union and Communist China boast that they have established not only socialism but also democracy. More than socialism, communism is considered an international creed.

But we have the Titoist, the Maoist and the Russian varieties. Each of these considers itself as the original Marx-Leninism and repudiates the claim of others to be the same. However, the communists and sometimes even the socialists forget that socialism without democracy is nonsense, if honestly meant. There can be no political democracy unless there is also a good measure of economic equality. Further, the very natural and logical end of democracy is some kind of socialism, as is clearly seen in the various democratic regimes in Europe, and in Austria and Newzealand. There can also be no real democracy in a society that is divided into haves and have-nots, into the inordinately rich and the miserably poor. This was truly pointed out by democratic reformers and by revolutionaries, headed by Marx, in the 19th century.

We believe that apart from semantic confusion, purposely and deliberately created by dictatorships, to misguide their own people and the gullibles outside, there can be no real Panchayat Raj or basic democracy under totalitarian regimes. Whatever measures of decentralisation, economic or political, that are introduced by dictatorships, are designed for greater efficiency and strength.

We have, in India, a classical example of absolute power in the Centre and Panchayat Raj at the base. In ancient times India had an effectively functioning Pan-

chayat Raj. But because the Central authority, under kings and emperors, was arbitrary and totalitarian, the local units in the villages, even though they had a large measure of local autonomy, could not save the country from disintegration and foreign rule. Foreign rule ultimately brought about the stagnation of Panchayat Raj. This should warn us against giving credit to any dictatorship, which may appear to be anxious to strengthen democracy by talking about basic democracy and even when it takes some steps to create local units of self-government. Such devices are merely meant to strengthen the power of the dictatorship and making it at the same time to look democratic and therefore, respectable. Let no lover of democracy be misled by the tall talk of the dictators.

They must be known what they really are—the enemies of democracy, of civil liberties, of rule of law, and of the supreme worth of the individual.

THE INDEALIST FEW

When the wick is burning at its tip the whole lamp is said to be lighted. The ideals of life find luminous expression only in the top most few. If in any country even a small number of its people succeed in realising an ideal, that is a gain for all the people. If ever the day comes in India when her leading men hold aloft the highest Truth and highest Good above other considerations, and regulate their lives accordingly, then they will give a special direction and power to the efforts of all.

—Rabindranath Tagore

SOCIAL ANIMAL

"As soon as we are born, the world gets to work on us and transforms us from merely biological into social units. Every human being a very stage of history or pre-history is born into a society, and from his earliest years is moulded by that society. The question which comes first—society or the individual—is like the question about the hen and the egg. The individual apart from society would be both speechless and mindless."

—E. H. Carr

To strive with an equal is a doubtful thing to do with a superior, a mad thing; with an inferior, a vulgar thing.

—Seneca

G. K. CHESTERTON

By SRIVATSA

A writer like Gilbert Chesterton is almost impossible today. There are, it is true, many rebels against the current fashion which takes the form of brutality for the sake of brutality, or a tired depression, or putative heartiness and cleverness. A rebel, however, is an incomplete person; he is so angry with what he is destroying that he often has no perception for other aspects of life and thought. Indignation is no safe guide. If, as it has sometimes happened, the writer takes refuge in irony, the irony of protest often degenerates into a snigger. No one can read Lytton Strachey, for example, without being disagreeably impressed by the vision of a man sticking out his tongue against his betters.

Chesterton was certainly unorthodox, though he happened to be defending orthodoxy. But he was never a rebel in this rather common sense. He was rather a force of nature that had invaded letters, exuding geniality, laughter and emitting, it must also be confessed, perpetual noise. No one can read Chesterton for some time without being deafened. He was always writing at the top of his voice, as it were. He might plead in extenuation of this that he had, as he conceived it, very important truths to proclaim and that he was no eager to proclaim them. It was high spirits, both mental and physical, bubbling over in sheer happiness. Such a frame of mind cannot be conceived in an epoch covering in the shadow of the hydrogen bomb.

Chesterton's main weapon was the paradox. Some earnest souls rather object to it; it seems to them to be indecent. But the fact is that the paradox only attempts to draw attention by inverting truth by placing it on its head, as it were. This is a method capable of misuse, and it will have to be conceded that Chesterton often tended to employ it too often, sometimes to achieve only paltry effects. But this failing might be fairly attributed, again, to his vivacious mind and quick imagination which, eager to make their impression, do not pause to consider their weapons too closely. He was often tempted to choose what came nearest to his hand. He was prodigal of his gifts and loved to shower them. If, in this largesse, there were some dross, that should be cheerfully endured.

At its best, however, the paradox was

a glittering and also deadly weapon. Chesterton could never be ignored with impunity. He was not, and he was engaged in fifty controversies at the same time, perhaps the most notable of these being those with Bernard Shaw and Wells. These were foemen worthy of his steel, and he set out to combat with them in pure intellectual jousts. In fact, he could never resist an argument and it seemed as if he rushed about the country seeking controversialists.

This unorthodox weapon as well as the "apostolic blows and knocks", as Samuel Butler (he of the Restoration) called them, Chesterton laid at the disposal of orthodoxy and old times. Neither of these is superficially attractive, but it was left to Chesterton to make them as plausible as if they were some wild revolutionary ideals to follow which men would be prepared to give up their lives. It was curious that such a lover of the past should have wielded a vigorous, sometimes rather hard and metallic, style. Burke too appealed to precedent, and Carlyle loved to invoke the bygone centuries. But their methods were different. Burke was majestic, ceremonious, processional. Carlyle, who preached the virtues of silence in thirty loud octavo volumes, almost bodily thrust his reader into the past where Jocelyn de Brakelonde played the Boswell to his Abbot. But Chesterton utilised what might be called the characteristic modern style, pellucid, hard hitting, making no concession to attractiveness of form, in achieving the same effects.

Chesterton was a voluminous writer. (It was he who sanctioned the gibe against himself that he could give up his seat 'in the omnibus to two ladies'). Excessive length is often a drawback, but not in Chesterton, who had so many things to say. There was never the suggestion that he had outwritten himself. He had so many irons in the fire. As a "little Englander", he was concerned to inculcate real patriotism that would not count national greatness in terms of areas marked red on the world map. He had to protest against the encroaching power of the State, the insidious march of bureaucracy. He had his history of England to rewrite, exposing the robber barons and resuscitating Cobbett. He had to pour the vitals of his wrath on the devoted head

(Continued on page 999)

A New Theory Of Gravitation

By A. KOLTSOV

Why do all bodies, when raised into the air and left unsupported, fall to the Earth? Why do the planets and stars revolve in permanent orbits without colliding with one another? The answer is the same in both cases: this happens because of a force known as gravity.

Unfortunately, science is yet unable to give as simple an answer as that about the origin and nature of gravitation. Indeed, physicists call it the greatest mystery of nature.

Different theories have been put forward by scientists in many countries to explain gravitation. They agree, though, that the basis and carrier of gravitation is graviton. But just what is the graviton—a corpuscle or a wave?

The proponents of the corpuscular theory believe the graviton is a particle because it shows up in the world of matter. They have even calculated its radius—it is 10⁻⁵⁴ centimetre, or a few sextillionths as great as that of the electron. On the other hand, the advocates of the wave theory are convinced any exchange of material particles within, say, the nucleus of an atom, where the force of attraction is particularly great, is entirely out of the question. They insist that gravitation is an electromagnetic-wave phenomenon, for this alone, according to them, explains the all-pervading nature of gravitation.

The present dispute reminds one of a similar dispute physicists had in the twenties about the nature of light.

Nature of light

As may be recalled, there were doubts about the nature of light until two conflicting hypotheses—the corpuscular theory and the wave theory—were combined into a single hypothesis. As is believed today, light is both a stream or ray of corpuscles and quanta of electromagnetic energy, called photons.

This tempts one to approach the problem of gravitation in a similar way by combining the two hypotheses put forward to explain the source of gravitation. However, many difficulties—much more formidable than in the case of light—stand in the way of such an attempt.

The atom is a thing about which we have a more or less clear idea, as we have

about both visible and invisible light, which is the energy released by electrons.

But what about the graviton whose size is negligible compared even with the electron? If it is of a wave nature, the graviton must oscillate as a frequency which calls for a revision of Einstein's relativity theory. For, as follows from his theory, nothing can travel in a vacuum faster than light.

However, a Soviet scientist, Dmitry Ivanenko, has come out with the bold idea that there is, in nature, something which travels at a superlight speed in defiance of the well-established law. If he is right, a single theory of gravitation can be developed. At the same time, the very basis of physics will have to be revised, much as it was done when Einstein had made his discovery.

Leo Landau, a prominent Soviet physicist, has pointed out that a host of problems had accumulated in physics in recent years, defying solution by the existing theories. One such problem is the mystery of nuclear forces which surpass by a wide margin even the force of gravity.

Ivanenko's theory is an attempt in this direction. The tenor of his theory is this.

Contemporary physicists work on the assumption that all space between material bodies is a field or rather three varieties of a single field: electromagnetic, gravitational and nuclear. They know almost nothing about the origin of the last two fields. Ivanenko reduces the field to two varieties—electromagnetic and gravitational and believes that the nuclear field is a derivative of their composition.

Here is what the author of the new theory says about it:

"As will be recalled the nucleus of an atom contains positively charged particles called protons. Although they carry like charges, the protons do not repel, as they ought to by a well-known law of physics. Indeed, they are held together so strongly that a colossal force is required to break them apart.

"What is the force that packs protons together? An electric one? No. For, even if half the protons in a nucleus were negatively charged and the other half positively charged and they would attract rather

than repel one another, the force of attraction would be one-fortieth of what it actually is with all the protons inside a nucleus charged positively.

"Another argument against the electric nature of the binding force is that it does not explain how neutrons deprived of any electrical charge are held within the same nucleus.

"Nor can we suppose that this the force of gravitation, for it is much weaker than the one binding the nucleus together. In a word, the nuclear forces have proved more complicated than the electric forces of attraction or repulsion or, in fact, any other forces known to man.

"The well-established opinion is that the interaction is an exchange of material particles of electromagnetic nature (much as electric charges interact through an exchange of photons). It is believed that nuclear particles exchange mesons. But the mass of a meson is several hundred times the mass of an electron. At the speed of light, with which the particles travel in an atom, the mass of mesons grows many times. Is the meson not too heavy and awkward an "intermediary" between the protons whose mass is appreciably less?

"Would it not be more reasonable to suppose that the exchange inside the nucleus is carried out through some other, lighter particles of electromagnetic origin such as the graviton? For the mass of the graviton is so negligible that even at super-light speed it is much less than that of the proton. In fact, there is no speed limit for the graviton—it exists, as it were, beyond the laws of physics known to us. That is why the graviton can effect interaction not only within the nucleus but also in the macroworld and, indeed in the universe. Gravitation is the same everywhere.

"One may ask why the graviton, if it displays electromagnetic-wave properties, does not emit radiation of a specific frequency, as light does. Probably because the frequency of its radiation is beyond light frequencies. Therefore, the speed of the graviton is higher than that of light. This explains why the existing instruments designed to measure sub-light speed fail to indicate anything when it comes to measuring the speed of gravitons."

This approach explains also why it is wrong to say that the binding force in the

nucleus is much stronger than the gravitational force. This conclusion is made on the assumption that gravitons have the same speed as the other particles, or the speed of light. However, even a small addition to the sacred figure of 300,000 kilometres per second changes the picture radically. At a speed of 320,000 kilometres per second the gravitational forces within the nucleus will be several times stronger than the electric forces.

The new theory takes into account both the interaction between the masses of gravitons and nuclear particles and between their electromagnetic fields. Thus, the interaction between the gravitational and electromagnetic fields covers the whole range of processes occurring both within the atom and in the stellar world.

The theory is a bold one. It remains to be seen whether it holds water. But even at this stage it convincingly explains some cosmogonic problems, and above all the origin of planets and their rotation about their axis.

Shame is an ornament to the young, a disgrace to the old, since an old man ought not to do anything of which he need be ashamed. The virtuous man does not feel shame, if shame is the feeling caused by actions, since the virtuous man does not do base actions. Shame is a mark of a base man, and springs from a character capable of doing a shameful act.

—Aristotle

* * *

Men are born with two eyes, but one tongue, in order that they should see twice as much as they say; but, from their conduct, one would suppose that they were born with two tongues and one eye; for those talk the most who have observed the least.

—C.C. Colton

* * *

Controls give rise to fraud, suppression of truth, intensification of the black-market and to artificial scarcity. Above all, it unmans the people and deprives them of initiative: it undoes the teaching of self-help they have been learning for a generation. It makes them spoon-fed.

—Mahatma Gandhi

Thinking In Tens .

By Prof. J. B. S. HALDANE

From October 1, 1958, we have started using the metric system for practical purposes. I have no doubt that this is a wise change. We must certainly abolish many of our old weights and measures, for the very good reason that a seer, for example, is not the same weight throughout India. And we had much better adopt a planned system rather than the unplanned system of yards, pounds, acres, and so on still current in the U.S.A. and England. Such a change is not very serious for ordinary people. It is difficult for managers of factories. But it will cause far less trouble now than it would have done if postponed for another twenty years when our industries will be more developed.

I dare say some people are asking 'why copy other nations, why not devise our own Indian system?' The answer to them is simple. The metric system was not invented in India, but it is the natural development of ideas which were invented in India. Once you learn to think in powers of ten you will naturally want a measure which is a thousand times the measure used in buying cloth or measuring a house, namely, the metre, and another which is a thousandth part of it. And it is reasonable to have simple connection between measures of length, area, volume and weight. But why think in tens? Some traditional measure systems, both Indian and European, are arranged so that one unit is two, four, eight, or sixteen times the unit of which it is a multiple. The answer is that India has imposed the decimal system of arithmetic on the world and must take the consequences. Until seven hundred years or so ago we often used the scale of sixty in Europe. But as early as the Yajurveda, India had words for powers of ten up to at least a hundred million, and in classical Sanskrit, these go up to the mahaksauhini, which is twenty three tens multiplied together. This is in fact quite a useful number in modern science. A gram of hydrogen contains just over six mahaksauhini of atoms. The ancient Greeks, on the other hand, had no names for powers of ten above ten thousand.

India imposed the decimal system of arithmetic on the world after inventing the symbol for zero which made it possible to represent any number with ten symbols.

No doubt the inventors of this system were helped by the fact that in Devanagari and related scripts the meaning of a symbol may depend on its position in the word. The Romans had the same idea. For example in their system I meant one, and V five, while VI meant five plus one, or six and IV five minus one, or four. But this proved much less fruitful than the Indian idea that 1 may mean one, ten, a hundred or even a mahaksauhini according to its position.

Aryabhata's System

The great Aryabhata invented a system in which the consonants represented the numbers from 1 to 25, and the multiples of ten from 30 to 100, while the vowels, including of course the cerebral R, and diphthongs, gave powers of a hundred. Thus ga means three, gi three hundred, and so on, up to gau which signifies three multiplied by ten to the power of sixteen. This system sufficed for all the numbers which an astronomer needed fourteen centuries ago and could still be useful. For example, the speed of light is very nearly ge centimetres per second. However modern astronomers need numbers ever larger than hau which was Aryabhata's largest.

Aryabhata is perhaps born again as my former colleague Professor C. W. Allen, of University College, London, who has invented the convenient word dex, meaning decimal exponent, for a ratio expressed as a power of ten. For example, the ratio of the distance which a flash of light traverses in a second to a metre is about eight and a half dex. For this distance is three hundred million metres.

Dex and the World

When we look at the world from this point of view, the interval between a human height and the diameter of an atom is about ten dex, and another four must be added to get down to the diameter of an atomic nucleus. The interval between a human height and the largest distance yet measured with anything approaching accuracy is twenty four and a half dex. So man is one of the smaller features of the universe. The whole range of measurement, whether of distance or time, is about forty dex, or a little less. One might think that the range of masses would be a hundred

and twenty dex. And so it would be if it were not for the fact that the larger the volume we study the less is the density of matter in it. Atomic nuclei are very dense, but even in the heaviest substances they only occupy a tiny fraction of the whole space. Stars, such as the earth or the sun, are moderately dense, but again the distances between them are enormous. So the range from the lightest particle yet weighed, namely, an electron, and all the matter whose existence is known, is about eighty dex. These figures give us the present range of science. Of course, it may be extended in future. If, as is not impossible, the human mind consists of finer sorts of matter than have yet been investigated by physicists, which was the teaching of the Sankhya and other ancient Indian philosophies, the scale may be extended downwards.

Learning Science

One minor advantage of the metric system is that it will make it easier for Indians to learn science. In the first place the metric system is always used in scientific work. And secondly the time wasted in learning about piculs, furlongs, and the like can be spent in learning how to deal with decimals, which are needed in all scientific work.

We still cling to old-fashioned measures of time. And I think this is inevitable for some generations. The metre is defined as the distance between two marks on a bar of metal in Paris. You cannot keep a standard piece of time one minute long. The day is not a good enough standard. It certainly varies in length, and is lengthening at present. Some physicists hope to replace the earth as a clock based on atomic vibrations. There is a real difficulty here, for people will certainly continue to use the day as a unit, even though its length is increasing. I think, however, that thirty years or so hence we shall be able to make proposals for a simpler and more scientific system of measuring time.

However, that may be, the adoption of the metric system is not only a step in the emancipation of India, it is a step in the conquest of the world by the idea of thinking in powers of ten, which originated in India. With the adoption of the metric system in India the ideas of Aryabhata, after conquering Europe, are returning in triumph to their native land.

G. K. CHESTERTON

(Continued from page 995)

of Prussianism. That strangely little read book of his, with a rather misleading title, "The Crimes of England", contains in quintessence his flaming views on this question. He had his own theory of the universe to promulgate. Full to overflowing with missions, he could not write too often or too quickly. What is surprising is that he was seldom cheap or common; always what he had to say attracted attention, not always because how he said it.

Chesterton had a mission, a duty to perform. It was to recover for the world lost in the cruelties and inanities of "modern life" the pieties and the quiet happiness of the past, the "Merry England" of Chaucer. It was inevitable that he should have been led to the Roman Catholic Church in his attempt to redress the balance. Perhaps the influence of his lifelong friend, Hilaire Belloc, whose unyielding and rather obstinate mind, however, contrasts with his own, also weighed with him. He has since his death been rather taken up by some overzealous friends of the Church, and he appears to be in danger of being made the "lion" of a clique when they perhaps think that they are canonising him. This apart, this genial author who, it might almost be said, was a philosopher despite himself or, at least, a laughing philosopher, has much of interest to say to Indian readers. His Father Brown, detected in terms of souls and intuitions and, consequently, makes a welcome change from the Sherlock Holmeses, the Hercule Poirots, the Lord Peter Wimseys. His understanding of the East was not very profound or unbiased, and his frequent sallies against it will be read with amusement both as born of ignorance and of an eagerness to exalt the ideals of the West in an unnecessary competition. Nevertheless, there is much to admire in his exposure of the modern State's overweening ambitions and in his emphasis on the value of the simple things of life. He is always enthusiastic, and he can convey his enthusiasm to others. His poems read as if they were all marching songs, with a brass band playing invisibly. His style radiates animation and verve. Such an author deserves close study today, despite his mannerisms and prejudices.

A man used to vicissitudes is not easily dejected. . . . Samuel Johnson

Teaching Machines

By CHARLES M. WEISENBERG

Educators in the United States do not talk of eliminating teachers with mechanization; rather they speak of giving the teacher his most valuable aid since the printing press was put to use making textbooks.

In more than a dozen research laboratories scattered across the United States, a major educational revolution is brewing, and if it succeeds the American school system will be catapulted into the space age. Teaching machines may well be the catalyst for the country's most dynamic changes in teaching philosophy, textbooks, grading systems, curriculum, school architecture, even the very routine of school life.

Although this is one of the most technologically sophisticated countries in the world, the phrase "teaching machine" causes most Americans to recoil. It brings to mind visions of a science-fiction world, filled with robot-like people whose lives are controlled by machines. Thus automated teaching is a concept many will oppose simply because it sounds objectionable. There may also be organized and well-directed opposition from groups such as the teachers unions. In any case, automation will open new and violent debates on the future of education in the United States.

Leaders of the new revolution, for the most part, are psychologists specializing in studies of the learning process. Like many in America today, they see the need for far-reaching improvements in the educational system. These men do not talk of eliminating teachers with mechanization; rather, they speak of giving the teacher his most important aid since the printing press was put to use making textbooks.

"Although the technology of teaching has expanded and each generation of children is better taught than the last, the fact is that the ramifications of human civilization have far out-paced the art of teaching," Eugene Galanter told the National Association of Secondary School Principals in 1960 in Portland, Oregon. Galanter also told the educators that "effective teaching has always frightened people" from the beginning of time, and he said that the use of teaching machines can now triple the effectiveness of the school programme.

There are as many kinds of teaching machines as there are men working on them. Professor Sidney L. Pressey of Ohio State University fathered the movement in

1926. A leading exponent, Dr. B. F. Skinner, today is using his own teaching machine as a regular part of his Harvard University freshman class in psychology. In New Mexico one firm is offering a "quiet, jam-proof, cheat-proof" teaching machine capable of giving instruction in seven subjects. Elsewhere automated teaching devices can be purchased from \$65 to \$5,000 apiece. There has been no mass movement to buy these instruments because there is still too little known about them and their application to an educational programme. To the vast majority of teachers, to Board of Education members and to the public at large, teaching machines remain a mystery.

There are many approaches being followed by researchers in this field. All machines, however, are designed to do the same basic job. Machines actually teach, through the ancient Socratic question-and-answer principle. The student is led through a series of carefully predetermined questions presented increasing difficulty so he will gain knowledge of the material. Basic to all machines is the need for the student to participate actively in his education by constantly responding to the instrument. Unlike a human teacher, these devices will not give instruction while the student is gazing out of the window or carving initials on a desk. Another important aspect of the machines is that they give the student an immediate evaluation of every answer. A constant knowledge of results does much to reinforce correct answers and point out errors before the student assumes they are facts. Psychologist-researchers say these basic elements put into practice some of the most important "laws of learning."

To understand the operation of a teaching machine it is necessary to realize that the question-and-answer technique can be handled by multiple choice or by constructed response problems. For instance, a multiple choice instrument has several buttons the student can press to indicate his answer. The questions appear on a screen or behind a window on the machine. Seve-

ral possible answers are presented at the same time. Although the techniques may vary slightly, the general procedure is for a correct answer to bring up a new question. Frequently the student is given several opportunities to answer the question, since he cannot progress until a correct answer has been recorded.

A machine demanding constructed response presents the question with space for the student to mark his answer by filling in words, figures or symbols. When the answer is written down a lever is pulled, exposing the correct answer and covering the student's answer with a transparent shield to prevent any alterations. The student has one opportunity to answer each question.

There is no general agreement on the relative merits of multiple choice versus constructed response questions. Some machines use a combination of the two approaches. This is one of the important areas of automated teaching that requires more exploration. All teaching machines are being developed with the basic teaching philosophy that repetition is essential for effective instruction. The repetition may be a simple repeat of previous questions or a new series of questions covering the same materials from a different viewpoint.

In Santa Monica, California, five young men are working on what promises to be the most versatile and completely automated teaching machine in the country. It can duplicate the operating procedures of all existing machines and has a unique method of its own. The heart of the machine is a computer, the kind of electronic brain responsible for successful automation in guiding space satellites as well as maintaining book-keeping records here on earth. The computer used for this project is slightly larger than a four-drawer filing cabinet; it controls a random access slide projector and an electric typewriter. The computer selects questions to be projected on a screen and the student indicates his answer on the electric typewriter. The computer then evaluates the answer, gives the student his results via the typewriter, and proceeds to select the next question. Time consumed in the complete cycle is calculated in micro-seconds. This experiment is being conducted at System Development Corporation, a nonprofit organization.

The computer-based teaching machine

study began two years ago and is still in the formative stage. But even now the infant machine is so sophisticated that it is almost necessary to describe all other teaching instruments as primitive. The computer's electronic memory makes the machine completely responsive to the needs of individual students. That is to say, each student receives a series of questions based on his ability and knowledge, although many students may use the machine simultaneously. It would be possible to hook up a dozen question screens and answering devices to the computer and each student would still receive a different series of questions. The secret of this operation is to be found in a technique called branching.

The computer branches a student on to the secondary list when his answers indicate failure to grasp a particular concept. Should the student reveal difficulty with the more basic elements, he is again branched to an even more fundamental list. It is important to note that any time the student is on a supplemental group of questions and indicates an understanding of the material he is branched back to the primary list. The computer gives this teaching machine amazing versatility because it can adjust the sequence and nature of problems on any number of factors. It can branch following errors on a number of scattered questions, errors on a series of questions, errors on specific key questions, time taken to answer a specific question, time taken to answer a series of questions and student self-evaluation. The machine is capable of dealing with individual differences in a way that is impossible for a teacher with a class of 20 or more students.

The System Development Corporation pilot model uses a standard computer, which means there is a great deal of equipment energy going to waste. Researcher Ralph Melaragno says specially designed computers will increase operating efficiency and offer a choice of installations. A giant computer could be built to teach a hundred or more students several subjects at the same time, or miniature computers could be designed for desk top use.

The pace of automated instruction is determined by each student and his ability to answer questions. Researchers claim this as a major advantage over present classroom situations where the teacher

must set a pace not too slow for the fastest and not too fast for the slowest.

It would be presumptuous for anyone to claim he has solved the problem of automated teaching with many important areas of basic research untouched. Nobody, for example, has looked into the kinds of problems that might develop out of the relationship between students and machines. What will be the effect on those intangible benefits teachers insist can only be gained through constant personal contact? "Instead of oiling machines the teacher needs to spend her time oiling children, at the right spots and at the right time, and where they are at the moment," insists the editor of one education magazine.

Psychologist-researchers are still in the surface-scratching stage of this work, but some teachers already are getting ready for automation. James D. Finn, professor of education at the University of Southern California and president of the National Department of Audio-visual Instruction, says education is the one aspect of American society that has walled itself off from technological advances. He is urging audio-visual instructor to expand their horizons to include automated teaching devices so they will be ready for the future.

There are many so-called teaching devices on the market today and some are no more than mere educational toys. Many researchers, like Merlaragno, are apprehensive about merchandisers who may delay final acceptance of automated teaching by selling pseudo-teaching machines before the instruments are fully developed. Even under the most ideal circumstances it will be difficult to introduce automation into the school system.

School administrators may be convinced that there has been a serious lag in bringing the benefits of American technology to the school system, but they hesitate to incur the wrath of well-organized teacher and parent groups. Several unhappy experiences with educational television have made them extremely cautious in this regard. In Los Angeles, for instance, some teachers talk with pride about having held educational television down to a small experiment. Thus administrators are faced with the enormous task of integrating teaching machines without antagonizing teachers, scaring parents or upsetting students.

One testimonial for teaching machines comes from a New York educator who says that studies of mathematics with eighth graders show that topics can be covered in half the time with teaching machines. While he does not envision wholesale displacement of human teachers, he warns that anyone capable of being replaced by a machine should not be a teacher. "Teaching machines, or more correctly automated teaching, at present represents a method without a philosophy of application," he says.

Nevertheless, there seems little doubt that it is only a matter of time before automation comes to American schools. Like any major revolution it is impossible to predict the final results so early in the development. But this much is certain: automation will require new techniques and new concepts for every aspect of the educational system. The thought of leaving comfortable and familiar teaching techniques is frightening to some, but to others it is essential, exciting and filled with promise for the future.

Greatness of mind is not shown by admitting small things, but by making small things great under its influence. He who can take no interest in what is small, will take false interest in what is great.

—**Ruskin**

* * *

None deserves praise for being good who has not spirit enough to be bad. Goodness, for the most part, is nothing but indolence or weakness of will.

—**La Rochefoucauld**

* * *

A fool often fails because he thinks what is difficult is easy, and a wise man because he thinks what is easy is difficult.

—**Churton Collins**

* * *

WHO IS A GOOD OFFICER

The basic test of an officer of New India should be whether he can draw out the cooperation of the people. If the official who is in-charge cannot do that, it does not matter how clever or able he is, he is just not suitable for the task. The officer should not shirk manual work, but roll up his sleeves and get down to work and show to others how things can be done.

—**Jawaharlal Nehru**

Secondary Education In India

By SHRI MOHAN LAL

Secondary education is the weakest link in the chain of education in India due to some historical causes. Despite the best efforts and intentions of the authorities, it has not been put on an even keel so far for a variety of reasons, the chief among them being paucity of funds to finance new schemes and dearth of a particular category of trained personnel to man the multi-purpose schools as envisaged by the Secondary Education Commission (1953).

Another incidental cause, though not much appreciated, is the shorter duration of schooling. The proposed pattern of secondary education makes provision for a higher secondary course (eleven years' schooling) in preference to matriculation or a high school course (ten years' schooling) obtaining in most of the States. Though the SEC recommendations are being implemented, the process of implementation is to show to yield results. Some States like U.P., Maharashtra and Gujarat are still hesitant to switch over to the higher secondary course as they are doubtful about the usefulness of eleven years' schooling. Ironically, even after the lapse of seven years when the SEC submitted its report there are differences on the structure of school education in different States.

10 Years Inadequate

Keeping in view the dual role of secondary education as the terminal stage for a vast majority of boys and girls and the preparatory stage for university education for a minority of students, ten years' schooling is inadequate, as most of the students are 15 or 16 years old when they complete matriculation education. They are hardly fit either to pursue some avocation independently or to derive some tangible benefit from university education. But to mark their time they flock to colleges and use them as waiting rooms. They are constantly on the look-out for some suitable employment and seldom do they devote their time and energy to the pursuit of learning which is the sheet-anchor of university education.

This tendency on the part of the students has given rise to allied problems of overcrowding in colleges and mass failures at university examinations. There is a consensus of opinion among university teachers that students, barring a bright

few, coming out from secondary schools are intellectually ill-equipped and emotionally immature to follow abstract studies at colleges. They think that twelve years' schooling followed by a three-year degree course will go a long way in raising the standard of university education.

The Radhakrishnan Commission on university education and earlier the Sadler Commission categorically recommended the fixation of the age of 18 for entrance to universities. They also advocated that the Intermediate stage should be separated from the college and amalgamated with the secondary stage and the Intermediate examination taken at the age of 17 plus should be made the qualifying examination for students seeking admission to colleges.

The Secondary Education Commission did not give a clear lead with regard to the duration of schooling before the end of the secondary stage. In their anxiety to accommodate divergent structures of school education prevailing in different States, they, on the one hand, suggested four years' secondary education after eight years' elementary education, and on the other they recommended the prolongation of the ten-year matriculation course by one year. The Central Advisory Board after long deliberations fixed the terminal point at 17 plus, which appears to be the most logical and suitable in the existing circumstances.

Expert psychological opinion affirms that the adolescence period (14-18) is a critical period in human life. During the formative period attitudes, habits and even aptitudes are in a fluid state and they do not become conspicuously marked until a person attains the age of 17 or 18. Till then the parents do not know whether their children possess the requisite aptitude or ability for university education and a majority of students themselves are unaware of the possibilities and avenues open to them. Thus they are unable to decide upon on a suitable career in the absence of expert guidance and counselling facilities in most of the schools. In order to enable the students and their parents to choose some gainful employment or to opt for university education it is in the fitness of things that the terminal point of secondary education should synchronize with the end of the adolescence period.

In pursuance of the Sergeant scheme of education eleven years' schooling was introduced in Delhi in 1944. Since then it has been working there without showing an appreciable superiority to the matriculation course or the high school course obtaining in other States. The Delhi pattern of secondary education has not found ready acceptance in other States and that is why they are either reluctant or slow in adopting this pattern. A three-year integrated course of Delhi Higher Secondary has produced neither fish nor fowl, as the students desirous of pursuing technical or medical courses of study have to attend pre-engineering and pre-medical courses of one year's duration in order to qualify for admission to engineering or medical colleges.

No Preference

For admission to a technical school or joining the armed forces or even taking up a clerical job, the matriculation or its equivalent certificate serves the purpose. No preference is given to a student who passed higher secondary examination of the Delhi Board. Incidentally, this accounts for a large number of students taking the Punjab Matriculation examination or the High School examination of the U.P. Board.

The inescapable inference is that the Delhi pattern of eleven years' schooling has not commended itself to others on account of its inherent defect.

The reconstruction of secondary education is a colossal task requiring immense financial resources and bold initiative. If secondary education has to fulfil its twin function of supplying leadership at the junior level and enabling young boys and girls to become useful citizens, and preparing them for a serious pursuit of studies at colleges, its reform is an imperative necessity and can hardly brook delay. Any amount of money is worth spending to reconstruct secondary education to make it responsive to the changing needs of a dynamic society, because studies in advanced countries like the U.S.A. have unmistakably revealed that investment in human resources yields better dividends than investment in machinery. A socially desirable objective like education needs greater attention than anything else to improve the lot of the citizens.

In order to make up the leeway in the structure of secondary education some remedies

are worth consideration. Formal education should begin at the age of five and elementary education should be of eight years' duration. After that secondary education of four years' duration should start and it should be split up into two stages—one stage after two years' schooling when students intending to join junior technical courses, to enter defence services, and to take up petty clerical jobs should leave the secondary school after passing the examination conducted by the school itself. This, besides meeting the demand for skilled factory hands to man industrial undertakings, would ease overcrowding in secondary schools, which has become a common feature today.

Others desirous of pursuing studies in humanities, pure and applied sciences or higher technical or medical courses should have two more years of schooling in order to acquire full understanding and bias for the studies which they intend to pursue. Pre-engineering and pre-medical courses can be incorporated in the multi-purpose school curriculum, thereby obviating the need for running separate pre-professional courses and incurring extra expenditure. There should be sufficient flexibility in the school curriculum as to facilitate the transfer from one stream of studies to another without much difficulty on psychological or educational grounds. There should be one public examination known as School Final Examination after twelve years schooling. An integrated syllabus of studies for four years should be drawn up by a committee of experts and it should be adopted by all the States with some modification and variations suiting local conditions in order to secure a broad measure of uniformity in the pattern of secondary education in the whole country.

(Courtesy: The 'Hindustan Times')

In calamity any rumour is believed.

—Publilius Syrus

* * *

Who hath not known ill fortune, never knew himself, or his own virtue.

—David Mallet

* * *

Sweet are the uses of adversity; Which, like the toad, ugly and venomous, Wears yet a precious jewel in his head.—Shakespeare

Need For Cooperative Farming

By SHRI V. L. MEHTA

Although it is now over a decade since co-operative farming came to be considered seriously as a form of organisation to be fostered under a plan of national economic development, it is not quite certain whether there is today among the public or even among administrators, greater appreciation of its place in the national economy than was the case at the advent of Independence and the commencement of the era of planning. Time was when the creed of individualism so influenced thought and action with us in India that even the principle of co-operation in its modern economic sense was deemed inapplicable to our economy by many among the leaders of political and economic thought. At present, however, we shall find few taking the view that co-operation has no message for us. But they and many others make a distinction between co-operative farming and forms of co-operative effort in the field of agriculture.

The opposition of such people to co-operative farming rests on two grounds—Ideological and Practical. The entire concept is, they urge, opposed to this spirit of co-operation. Co-operation certainly connotes self-help, but, equally with it, also mutual aid. The closest form of association for the promotion of common economic interests is not ruled out, provided the organisation has a democratic basis, it rests on community effort and it promotes equalitarianism. One of the founders of the modern co-operative movement, Robert Owen, visualized a change being brought about through the instrumentality of the co-operative movement in the structure of society, involving the replacement of individualism and competition by a new order based on common ownership and community living. His conception of the co-operative commonwealth was a congeries of local communities—self-supporting colonies—each resting on the principle of mutual service and educating new generations in the spirit of social fellowship. Writing about and working for a new Ireland nearly three-quarters of a century later, the philosopher-poet George Russel (AE) pleaded for the creation of a rural community which connoted an association of people having common interests and common possessions, where life would cease to be individualistic but would represent economic and social partnership.

That the pursuit of co-operative ideal leads to social change is implicit in the teachings, all over the world, of those who have associated themselves, in thought or action, with the co-operative movement.

But it is not on ideological grounds that co-operative farming has been advocated in India. Shortly after the installation of a National Government at the Centre, came the appointment of the Agrarian Reforms Committee. Examining the position of those whom it described as "small and middle farmers", it urged that there should be no room in our economic structure for individual farming on holdings less than the basic minimum. They should be replaced by co-operative farms. A few years earlier, in the Bombay plan formulated by eight eminent industrialists a plea had been put forward that co-operative farming was needed for bringing about a reduction in the units of cultivation for the purpose of securing greater yield from the land. The per capita availability of land for those engaged in agricultural production, with its concomitants of low productivity and lack of all desire for progress, represents a feature in our economy that led the Planning Commission, when the First Five Year Plan was drawn up, to recommend that, apart from others engaged in agriculture, small and middle farmers, in particular, should be encouraged and assisted to group themselves, voluntarily, into co-operative farming societies as part of a national programme.

When the Second Five Year Plan was formulated, the Planning Commission expressed the desire that co-operative farming should be developed as rapidly as possible. It urged that such essential steps should be taken as would provide "sound foundations for the development of co-operative farming, so that over a period of 10 years or so a substantial proportion of agricultural lands are cultivated on co-operative lines". It envisaged the extension of co-operative farming, particularly in the following spheres:

1. pilot project in community development areas which should become practical training centres for co-operative, agricultural and other extension workers;
2. surplus areas that become avail-

able with the imposition of ceilings on holdings, where settlement should, as a rule, be made on co-operative lines;

3. tribal areas where communal ownership is the rule;

4. holdings which are below the basic or floor limit, grouped into larger units of operation to ensure the economies and advantages of large units of operation to ensure the economies and advantages of large-scale organisation.

Nagpur Resolution

This represented the place of co-operative farming in national planning, some five years back. Subsequently, a couple of years later, at its Nagpur session, the Indian National Congress adumbrated its programme of agrarian reorganisation in which joint co-operative farming, on a voluntary basis, was accepted as the pattern of economic organisation most suited to the conditions of our agrarian economy. This declaration, which was later endorsed by the Government of India, evoked, unfortunately, a controversy, which was mainly political, but where hostility to co-operative farming was also voiced by those who were averse to any fundamental social change. Since then we have had a comprehensive survey of the subject, especially in its practical aspects, carried out by the Working Group on Co-operative Farming constituted by the Government of India. Although in the Draft Outline of the Third Five Year Plan, it is made clear that the Report of the Working Group was under consideration, now that Government have completed their examination of the findings, it may be assumed that these will form the basis of the Plan when it assumes final shape.

We do not propose to enter here into the details of these recommendations and the action proposed thereon by the Government. It is pertinent, however, to refer to certain observations to which expression is given in the Draft Outline, since they seem to denote some departure from the line of thinking that induced the Government to accept "joint co-operative farming on a voluntary basis as the future agrarian pattern in India". For instance, to look upon co-operative farming as a form of organisation that would grow out of the success of the Community Development movement or the progress of 'service' or 're-

source' co-operative societies, shows inadequate appreciation of the change in outlook that co-operative farming constitutes. Joint farming may not necessarily evolve—as the Planning Commission expects—out of the growth of Community Development as now planned, which represents the result of individual economic endeavour.

Moreover, the problems before co-operative farming are not, principally, technical and organisational, as the Planning Commission seems to suggest. They go to the fundamentals of our agrarian economy. A cooperative farm does not work "under conditions which do not differ widely", as the Planning Commission believes, "from those under which the vast body of agriculturists live and work." In fact, it is because the cooperative farm operates differently that the social change which joint farming constitutes calls for sympathy and support on the part of the State, particularly of a government which accepts this as the pattern of agrarian organisation we should aim at. This would involve the extension of State aid which is not to be disfavoured, on the ground, as the Planning Commission fears, that it may "inhibit the growth of the movement". If we turn to the fields where, according to the Second Five Year Plan, cooperative farming was to be encouraged, we find that the benefit—social and economic—will accrue to underprivileged sections of the rural community whose betterment and organisation must be the special concern of the State.

The concept connotes a collectivist rather than an individualistic approach. It is such a social change which was visualized in the joint declaration made by the Prime Minister, Acharya Vinoba Bhave and other national leaders when they met at Yelwal in September 1957 where they attached great value to the formulation of a programme that combined the approach of social change with practical economic advantages. Such a movement for the promotion of a social order based on the fuller development of co-operative life and effort, was in the words of the national leaders, worthy of all help and encouragement.
(Courtesy: 'Kurukshetra')

Praise a hill, but keep below; praise the sea but keep on land

—George Herbert

The problem Of Foreign Exchange

By Prof. C. N. VAKIL

Since the days of the East India Company, India had a favourable balance of trade as a rule. This meant that we had an excess of exports over imports throughout this long period. It may be of interest to recall that this excess of exports was the method by which India was made to pay certain contributions to Britain, which has been described as the Drain from India to Britain. In other words, it was a sort of compulsory excess of exports which we made for a large number of years, to meet some of the charges which were levied on India for different purposes by the ruling country. In the Accounts of the Government of India, these charges were described as "Home Charges". During the First World War some changes took place, but the general trend remained about the same till the Second World War. The large amount of expenditure which India had to incur in rupees to meet the war operations of the Allies in India, particularly in their effort to drive the Japanese back, created a special problem of War Finance. India found these resources by inflation which created various internal difficulties. In return India was credited with equivalent amounts in sterling. Thus we had Sterling Balances in London at the end of the War, which could be utilised under certain conditions. This is the beginning of the flow of goods in the reverse direction. We could utilise these resources to buy imports of machinery and other goods required for our Plan.

It would be appropriate to note how other countries obtained resources for investment in connection with their development. The so-called advanced countries of the world were not able to develop their economies from their own resources. The United Kingdom was able to finance its industrial revolution with the help of the vast resources which it could draw from the colonies and dependencies of the British Empire. Apart from personal or non-official methods of exploitation, the amounts officially paid by India to the U.K. are recorded in the accounts of the Government of India as explained above. Both the U.S.A. and Canada were new countries with vast natural resources and limited population. In order to develop these resources, foreign capital, mainly British, came to these countries. Similar situations can be

found in connection with the development of other countries. It may also be noted that the process of industrial development in most of these countries was spread over a fairly long period and did not attract world attention at the time when it was taking place.

With the advent of independence in under-developed countries, beginning with India, the urge for economic development has grown. The problem, however, for countries like ours is different as well as difficult. We have a large and rapidly growing population, the majority of whom are poor and living on the margin of subsistence. It is not possible under these conditions for the country to have its own savings adequate to meet the demands for rapid development. Unlike other countries in the past, we are faced with the problem of rapid development, which means that we should bring about economic growth in a relatively shorter period. We have no political power to exploit other countries for these purposes as was done by some. At the same time, we do not have that affinity with other countries who can help, which the USA and Canada had. We have, therefore, to depend on the goodwill of other countries. Fortunately, the more advanced countries have realised that it is in their ultimate interest to raise the standard of living of the backward countries. This growing consciousness among the leading countries of the world at this juncture in our history is a great source of relief. The cold war between the two power blocs in the world has given an additional impetus to this tendency, with the consequence that countries like ours which are not attached to either bloc find it possible to get economic aid from both sides. There are, however, natural limits to such foreign aid. The demands of underdeveloped countries for development have grown. Countries in South-East Asia as well as in South America have been receiving some attention from the advanced countries in recent years. The emergence of national consciousness in Africa has created a new factor, namely, the need for development of the various African countries, who have received or are about to receive independence. This simultaneous demand from various quarters limits the amount of economic aid, which can be

made available from the countries which are able to spare the same.

A new and somewhat unexpected factor which has come into prominence in very recent times is the large export of gold from the U.S.A. During the war the monetary stocks of gold flowed from various countries to the U.S.A. with the consequence that the U.S.A. has now the largest stock of monetary gold reserves. It has given considerable assistance to other countries to restore their economic position after the World War. The recovery of Europe owes substantially to the Marshal Plan. Since then the U.S.A. has made elaborate arrangements for giving aid in different forms to a large number of countries including India. At the same time, it has military establishments both in Europe and the other parts of the world, which involve large expenditure outside the country. With the development of Europe the trade relations between Europe and the U.S.A. are changing their character. A combination of these forces resulted in an adverse balance of trade for the U.S.A. for which gold had to be exported to other countries. The movement was also partly due to speculative transactions which are inevitable under such circumstances. It is well-known that the Government of the U.S.A. is anxiously trying to restore its balance of payments position so that the outward flow of gold can be restricted.

For the Third Plan, we have estimated that we shall require certain large quantities of foreign exchange. We are aware that our own capacity to earn foreign exchange is very limited in as much as our exports are not adequate for the purpose. Our foreign exchange requirements are partly due to the need to pay interest and capital on account of foreign loans that we have already incurred. We have also to import certain large quantities of goods, raw materials and equipment for the industries that we have already established. Further development of new industries which we are planning requires the import of machinery. In view of the magnitude of our requirements to revolutionise our economic life in a short time, such a situation is likely to continue for years to come, though we are anxious to do away with foreign aid as soon as possible.

Our economic arrangements in relation to other countries are thus fast becoming complicated. These complications are like-

ly to grow. We have, therefore, to be careful in watching changes in International Economic Relations in which we are involved. Whereas this is a vast problem, one factor which is conclusive is that we must have a long-term export policy with a view to solving our foreign exchange problem as soon as possible. It is obviously not desirable for us to be dependent on a large number of countries for small and big quantities of foreign aid longer than necessary. In our desire to have rapid economic development within the country, we have not paid adequate attention to the effort that is necessary in this important aspect of development. It is unfortunate that at this very juncture we find that our traditional exports, like tea and jute, are stagnant and are meeting with increasing competition from other countries. We have not yet developed the art of selling our goods abroad in competition with those of other countries. In this effort we have to learn a good deal from the experience of other countries; some of the points on which attention has to be given without delay may be summarised as under:—

(1) The export trade must be in the hands of people who have specialised in the work and are able to devote their major attention to the task;

(2) One of the essentials of success is that the export trade should be a profitable business. In return for this, the exporter should observe a code of honour, inasmuch as he should develop a national goodwill for the country, among the buyers of other countries by maintaining a supply of quality goods at competitive price and thus establishing relations, which will help us in selling our good abroad in larger quantities. The Government should be ready to help the exporter at least in the early stages by giving subsidy and other incentives;

(3) Both the business community and the Government should actively co-operate in having a suitable efficient organisation for a continuous study of the markets of the world and in doing propaganda to stimulate such markets;

(4) It should be possible for the industrial establishments in the country to adjust their production to the changing requirements of our foreign buyers;

(5) The aim should be not only to maintain and develop our traditional exports

like tea and jute, but also to launch on the systematic export of manufactured goods:

(6) To strengthen such relations from the long-term point of view, we should have cultural contacts as a means of better understanding with other countries which should include the study of languages of different countries, where we wish to maintain trade relations;

(7) These efforts should be actively supported by adequate Shipping, Insurance and Banking facilities, by a knowledge of trade techniques and procedures in other countries, by arrangements for exhibitions, fairs and emporia of our goods in different countries, and above all by the enforcement

by the trade itself of the necessary code of honour which should be observed by exporters in their dealings with foreign buyers;

(8) In view of the urgency of the problem suitable Research Teams of competent persons should be sent out in appropriate areas to make on-the-spot enquiries and to ascertain the best method by which our export trade can be stimulated;

(9) Export Trade should not be treated as a by-product of other activities;

(10) In other words, all reasonable steps should be taken to develop export consciousness in the country to earn the foreign exchange required by us.

(Courtesy: 'Finance and Commerce')

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COMMUNITY DEVELOPMENT IN INDIA

According to the United Nations, the term 'community development' connotes the processes by which the efforts of the people are united with those of governmental authorities to improve the economic, social and cultural conditions of communities, to integrate these communities into the life of the nation, and to enable them to contribute fully to national progress.

This complex of processes is then made up of two essential elements: the participation of the people themselves in efforts to improve their level of living with as much reliance as possible on their own initiative; and the provision of technical and other services in ways which encourage initiative, self-help and mutual help and make these more effective. It is expressed in programmes designed to achieve a wide variety of specific improvements.

Community development is broad in its aims and methods. Many of the programmes in the Colombo Plan region are nation-wide, although they began as pilot projects and have spread slowly. They are long-term programmes and not only do they have multiple objectives (social, cultural, economic, civic) but also they bring a wide range of means to bear on the achievements of these objectives.

Progress in India

Of all the Colombo Plan countries that have implemented the Community Development programme, that of India has been by far the largest and with the maximum of impact. The central objective of this programme, launched on October 2, 1952, has been to make the villagers self-sufficient in the primary needs of life, such as food, clothing and shelter. The emphasis has been on the development of self-reliance in the individual and initiative in the community, so that the people are themselves able to manage and run their affairs.

Priority for Agriculture

Agriculture, being the mainstay of nearly 70 per cent of the rural population, has received the highest priority in the programme.

Other activities of the programme include improvement of communications, promotion of cottage and small-scale industries, education, health and sanitation,

better housing, women's and children's welfare, as also the development of sports and cultural activities. Significant achievements have been made in all these fields. Much more important than the physical gains have been the change in the outlook of the people.

The Blocks, each one of 100 villages and a population of 60,000 to 70,000, are allotted only after the people in a given area have given proof of self-reliance through such norms as agricultural production, utilisation of irrigation facilities, keeping the village clean, having a cooperative, a panchayat, etc. Each Block undergoes a pre-extension phase of one year. Then it enters Stage I, during which a sum of Rs. 1.2 million is provided for five years. After a Block has passed through Stage I, it enters Stage II. The total amount of funds allotted for a State III Block is Rs. 500,000 for a five-year period. These special funds are in addition to the normal funds flowing from development departments.

Peoples' Participation

In the earliest projects, launched in October, 1952, it was noticed that the people came forward voluntarily to improve agricultural production, extend communications and pave the streets, put up schools and health centres and so on. So spectacular were the results that there was widespread demand from the neighbouring areas for extension of the programme. Today the programme covers 3,110 Blocks embracing 368,200 villages with a population of 204 million. The entire country is to be covered by Community Development Blocks by October, 1963.

Up to the end of September, 1960, the value of the people's voluntary contribution amounted to Rs. 937 million as against the Government expenditure of Rs. 2,008 million. During the First Five Year Plan, a provision of Rs. 965 million was made for the Community Development programme. The amount provided during the Second Five Year Plan was Rs. 2,000 million. The allocation for the Third Five Year Plan for Community Development and Cooperation will be of the order of Rs. 4,000 million.

T.C.M. Aid

In the initial stages, the United States

provided necessary funds for procuring equipment from outside India, such as jeeps, tractors for road building, agricultural demonstration equipment, mobile cinema units and other equipment for transport, audio visual aids etc. The revised estimated cost of the T.C.M. aid to the programme is \$13,525,195. Dollar assistance under the Indo-U.S. Technical Assistance for the purchase of equipment was discontinued about four years ago, and requirements of equipment are being met out of the Rupee provision in the Block budget.

Although the development programme of aided self-help was taken up by the Government agency with people's participation, the ultimate aim was to make it a people's programme with Government's participation.

Panchayati Raj

A high-powered team was set up by the Planning Commission in 1957 to review the progress of the programme and to suggest measures to accelerate it. This team, presided over by Shri Balwantrey Mehta, made recommendations envisaging a three-tier system of 'Panchayati Raj', i.e. setting up of statutory people's organisations at the village, Block and District levels. The system has now been implemented in Rajasthan, Andhra Pradesh, Madras, Orissa, Assam, Punjab and Mysore. It is expected that in about another year the pattern will be in force throughout the country.

Under the new set-up, the 'Panchayat' in the village will be elected by its adult population or the 'Gaon Sabha'. The Panchayats will send their elected heads or 'Sarpanches' to the next higher body—the 'Panchayat Samiti'. This will correspond roughly to the new unit of development, the Community Development Block, or a hundred villages on an average. The Samiti will also have co-opted members representing women, backward classes, etc. This body will be in overall incharge of the development of the area. The technical and other personnel of the Block will henceforth act under the Samiti's guidance. The apex of this three-tier system will be the 'Zila Parishad' or the District Council comprising the Presidents of the Block Samitis and the local Members of Parliament and the State Legislature.

Each Block is under the charge of a

Block Development Officer, who is assisted at the Block level by a team of eight extension officers. They are subject-matter specialists in agriculture, animal husbandry, cottage industries, rural engineering, social education, public health, cooperation and panchayats. There are ten 'Gram Sevikas' (women) in each Block. The Village Level Workers are given extension training for two years in various subjects of importance, and they help maintain liaison between the village people and the team at the Block level. They maintain a two-way traffic, acting as the multi-purpose extension agent at the village level and transmitting the people's problems back to the Block for solution.

Training Workers

Because of its all-embracing character, the Community Development programme has from the beginning encompassed the other Central Ministries, such as Food and Agriculture, Commerce and Industry and Education. They drew up their training programmes for workers in their respective fields. The Ministry of Community Development stepped in to provide training for other categories of workers. The Ministry has been developing its resources for training and orientation of such administrative and technical personnel—from the State headquarters to the field level—through the apex Central Institute of Study and Research in Community Development, Mussoorie, the Institute for Instruction on Community Development, Dehra Dun, and the numerous Orientation and Study Centres, Social Education Organisers' Training Centres, Mukhya Sevikas' Training Centres, and so on.

India has shared her knowledge and experience in the field of Community Development with other Colombo Plan Countries. Since 1956, twenty two persons from six countries have spent varying periods of training in India. The countries from which they came are New Zealand, Laos, (which sent the maximum number of 10) Burma, Indonesia and Nepal.

Testimony is like the shot of a long-bow, which owes its efficacy to the force of the shooter. Argument is like the shot of the cross-bow, equally forcible whether discharged by a giant or a dwarf.

—Francis Bacon

Teachings of

MAHATMA



GANDHI

Q. Write a few lines on Gandhiji's views on women and their education. What are his views about co-education?

Ans. Gandhiji's views on women and their education deserve special attention. He emancipated Indian women from age-old bondage and restored them to their rightful place in society. He brought them out from the four walls of the kitchen; he ~~might~~ ^{taught} them self-respect and made them ~~and the provision of technical~~ brave and courageous; he recognized their claim to property, put them on an equal footing with men and removed the dead-weight of custom and usage, which curbed their free growth. In the scheme of Basic Education no differentiation has been made between boys and girls.

His views on co-education are refreshing. He is not certain whether co-education would be successful in India. In the absence of conclusive evidence based on extensive experimentation, Gandhiji approaches the problem of co-education with an open mind, even though he laid it down provisionally that there should be co-education up to the age of eight, that as far as possible boys and girls should be educated together up to the age of sixteen and that young men and women should decide for themselves after they have reached the sixteenth year whether they would study together or in separate institutions.

Q. What do you mean by Nai Talim? Write a short note on it.

Ans. Nai Talim is mainly concerned with the regeneration of India in the first instance. It is designed to evolve not only a new social order, but, as Shri E.W. Aryanayakam puts it, "to create a different sort of person—one who neither has, nor wants, nor bows down before worldly wealth and power; whose joy lies in sacrifice and service instead of pomp and domination; who is content with the little that is necessary for health and happiness and never content so long as the humblest of his fellowmen lacks even that, and who is not swayed but the lesser loyalties of nation and community, but guided in all things by reason, justice and truth".

Nai Talim is based on justice, co-operative endeavour, productive work and respect for human individuality. It is essentially education for peace and international understanding. When the world is torn by conflicts and controversies, what it needs most is education for peace and international understanding. The Purani Talim has failed to meet this demand and our only hope for world peace lies in Nai Talim. ~~Then it enters into a dangerous~~ ^{It is now abundantly clear that man-} kind must find a way to live amicably or be annihilated by the engines of destruction devised by its own ingenuity. It has to choose between the Hydrogen bomb and Nai Talim. Such a dilemma has never faced the human race before. There should be spiritual regeneration or mankind will perish. The existing educational system and the social order are out of joint and all the educative agencies have failed to pull together. Nai Talim seeks to coordinate them all into an educational pattern.

The two World Wars in our lifetime have given a jolt to the conscience as well as the material and social life of mankind and thrown old institutions, customs, beliefs and traditions into the melting pot. This situation offers a great challenge and a great opportunity to the peoples and races of the human family to reconstruct their life and culture on a more rational and equitable basis. Nai Talim can accept this challenge and reshape things so as to make man worthy of his great heritage.

It is beyond any doubt that the implementation of the programme of Nai Talim will not be without difficulties and impediments, but since it is designed to fulfil the abovementioned noble objectives, its adoption cannot be delayed without serious detriment to the organic growth of our infant democracy.

Old age plants more wrinkles in the mind than in the face. —Montaigne

Doing a favour for a bad man is quite as dangerous as doing an injury to a good one. —Plautus

STUDENTS EMPORIUM

HOW TO DEVELOP YOUR MIND

Physical exercise leads to the development of muscle and consequent strength. An enforced stay in bed leads to weakness and even inability to walk. Nature gives more where more is demanded.

This principle applies to the mind as well as to the body. The more you use your mental powers, the better they become; the less you use them the weaker they become.

From this it is obvious that to develop an alert and well-informed mind we must keep it active and give it constant stimulus. Here are some suggestions for doing this.

1. Mix with Mentally-Alert People.—

"As iron sharpeneth iron, so a man the face of his friend," wrote the sage of old. Stated briefly, this means that mind stimulates mind.

If you would fight mental inertia, spend less time with those who are mentally inactive and more with those who show evidence of mental alertness and awareness. You will generally find alert people in such cultural groups as debating societies, dramatic clubs, or literary circles.

In addition to meeting such people at the weekly activities of these groups, you may be able to cultivate friendships with some and invite them to your home for intellectual discussion.

Radio and television can, when used wisely, be sources of mental stimulus.

Take a programme like the Brains Trust. Through its medium, highly intelligent people are virtually brought into our homes. Few of us would be able to entertain people of such calibre. As we listen carefully to their contributions, and to the cut-and-thrust of their arguments, we cannot fail to receive considerable mental stimulus.

Another source of stimulus and information are public lectures, to say nothing of exhibitions, museums, art galleries, concerts and recitals. Subjects of such lectures

may cover anything from theosophy to horticulture, or economics to exploration.

2. Read Widely.—This is an excellent means of acquiring an alert and well-stored mind—provided, of course, that we are wise in our choice of books.

When we read a good book with concentration, we are virtually shutting ourselves in with a mind probably better informed than our own.

The authors we read have a subtle effect upon us. They may coarsen us or refine us. If we choose reputable books of proven worth, we shall find our own minds become more sensitive and aware.

By reading, too, we may gather facts. Thus the more factual books we read, the quicker we shall acquire a well-stored mind.

The average reader can read twenty books a year merely by devoting fifteen minutes a day to them. But the serious student will wish to give longer to the task of mental improvement. Two or three hours several times a week at least should be given to this important task.

Full use should be made of the facilities offered by your local public library. Besides the thousands of thought-provoking, informative books in the lending section, the reference rooms of the larger libraries contain many valuable works, and, in addition, provide facilities for uninterrupted study.

Museums deserve special notice. They are the result of many hours of brilliant research and painstaking endeavour, and the outlay of thousands of pounds. An unhurried visit in conjunction with a particular purpose is always fascinating and profitable.

3. Study.—Excellent though wide and sporadic reading of good books may be, it is advisable to supplement this with more systematic and ordered study.

Much can be done if you concentrate merely upon one subject a year. Make use of one of the approved correspondence colleges or evening class courses for this purpose.

pose. They are an invaluable help, guidance and encouragement. Such enrolment will help you to persist at your tasks when you meet with difficulties.

In my opinion, some knowledge of history is an essential for the aspirant to an alert and well-informed mind. The present is largely the product of the past, and we shall adequately understand the present only as we have some knowledge of what has gone before.

Many of us became prejudiced against history as a subject when we had to grapple with it at school too young to appreciate its significance.

Go back to it in mature years, and you find it both gripping and fascinating. You are reading about people—flesh and blood.

They are creatures, who, though wearing different clothes, living in different conditions are possibly speaking a different language from our own, were basically the same as ourselves. They were, to use Shakespeare's words, "red with the same food, hurt with the same weapons, subject to the same diseases, healed by the same means, warmed and cooled by the same winter and summer" as we are.

History gives a fourth dimension to the enjoyment of travel. It adds to one's general sense of awareness and understanding, as well as improving our powers of conversation.

The reading of the biographies of the great is a relatively easy and interesting way of introducing oneself to history, as well as a means of meeting many fascinating and dominating personalities.

One biography awakens interest in another, and in this way the backcloth of history is slowly etched in for us.

4. Become an Accomplished Conversationalist.—We shall add much to our store of knowledge if we learn to talk to the right people in the right way.

Intelligent and well-placed questions to selected people will draw them out to impart to us their own knowledge and experience.

At all such items we must give them our whole attention and listen carefully.

5. Travel Abroad.—To travel abroad is a stimulating experience, especially if we are not carefully chaperoned by a courier of our own nationality.

The fact that so much is new and different to us, leads us to be more observant and to show more interest in everything we meet. Even the purchase of a newspaper or some apples may be something of an adventure in a foreign land.

New customs, another currency and a strange language provide problems with which we are compelled to grapple. We get to know another people, become acquainted with a different economy or another faith, have glimpses of another past.

All this is grist for our mental mill and has a beneficial and quickening effect upon our minds.

The methods enumerated above will not only give us an alert and well-stored mind, they will keep our minds in that desirable condition.

To adapt some words of the novelist Arnold Bennett: **People who would sooner hibernate than feel intensely, will be wise to avoid—not only literature—but ALL the practices advocated in this article.**

(By R. J. Lumsden in 'Psychologist'.)

* * *

HOW TO BEAT FATIGUE

Fatigue is one of man's worst enemies. Psychologists find it responsible for more unhappiness, more failures in marriage and business than any other single factor. Why?

You are an entirely different person when you're tired. Fatigue alters your personality so radically that your good qualities are relegated to the background and the spotlight is turned on your bad ones.

But something can be—*is*—being—done about it.

Fatigue, in most cases, is not caused either by physical work or by mental effort.

Whether you're one of those people who are tired all the time, most of the time, or just occasionally, it's important to remember that there are three kinds of fatigue:

(1) **Physical fatigue**, caused by muscular activity.

(2) **Mental fatigue**, caused by brain-work.

(3) **Nervous or emotional fatigue**, caused by anxiety, worry, frustration or boredom.

Physical fatigue presents the least problem and is the quickest and easiest to cope with. The physical worker can get

along with far less sleep and rest than the brainworker. This is because physical energy is replenished much more quickly than mental energy.

Also, the average physical worker doesn't accumulate nearly as much fatigue at the end of the day as the mental worker.

The quickest and most effective way to banish physical tiredness, according to studies at the University of California, is to stand under a cold shower for a few moments. Science hasn't discovered precisely why this has an instantaneous effect, but tests show that it works like a charm.

The average man can do twice as much physical work and accumulate less fatigue at the end of the day if he takes short, frequent rest periods.

Physical fatigue is greatly reduced when a housewife—or anyone else for that matter—does her work to the rhythm of music. This is because work performed rhythmically requires much less energy.

Now we come to **mental fatigue**. Mental workers who want to avoid "that tired feeling" must realize that the man who works with his brains requires more sleep than the man who earns his living with his muscle.

While it takes only about four hours' sleep to restore our physical energies, it takes twice as long to recover from mental fatigue.

When a brainworker loses two hours' sleep, his efficiency next day not only suffers, but he accumulates twice as much fatigue in the performance of his duties.

Rest periods are even more important to the mental worker than to the physical worker.

At the University of Cincinnati researchers have found that if your work is largely physical you will get the greatest benefit from hour rest periods by relaxing as completely as possible. But if your work involves **mental strain**, complete relaxation is likely to take the edge off your faculties to such an extent that you'll find returning to work difficult.

The mental worker, investigators found, should engage in some mildly stimulating activity because it "serves to maintain alertness and at the same time to relieve cramped muscles and a jaded brain."

Incidentally, you won't tire nearly as easily if your office or place of work is kept at the right temperature. You'll do the best work, and will be the least fatigued by it, when the room temperature is kept at 68-to-70 degrees F.

When the temperature goes higher or lower, increasing amounts of energy are required to maintain the constant body temperature of 98.6 degrees. Up to 50 per cent more energy is expended when the temperature is 90 degrees.

To perform mental work with a minimum of fatigue, it is highly essential that you have plenty of fresh air. To function most efficiently, your brain cells must have a plentiful supply of oxygen.

In a stuffy room or at altitudes where the oxygen content of the air is appreciably diminished, mental work requires more effort and energy.

At the University of Illinois, students were given intelligence tests while breathing air which contained a normal amount of oxygen. Then, with the oxygen content of the air artificially reduced, the tests were repeated. The students made much poorer scores.

To get the best and most effortless performance out of your grey matter you should also avoid slumping at your desk; assume a posture that will make it possible for you to breathe properly.

Now we turn to the matter of **nervous fatigue**. This is the most common form of tiredness. It is not caused by work, and cannot be banished simply by rest. It is caused by worry, anxiety, frustration, boredom, and similar emotional attitudes.

Since these states of mind drain our energies much faster than rest can replenish them, they are responsible for the feeling of "perpetual tiredness," or chronic fatigue.

If you're one of those people who are tired all the time, or if you wake up in the morning as tired as when you went to bed, then the odds are that you are suffering from the type of fatigue.

Boston's Lahey Clinic made a careful study of 300 typical chronic fatigue victims. It was found that an average of less than one out of five had even the slightest physical disorder. The trouble with the rest was purely psychological.

The noted neurologist, Dr. Walter Free-

man, who has made a life-long study of chronic fatigue, finds that additional rest actually worsens the victim's condition and makes him more tired than before. His studies show that patients respond quickest to a regime of rigorous physical activity, including such sports as swimming, horse-back riding, and hiking.

Exercise, Dr. Freeman points out, provides a release for the pent-up emotional tensions. Another way to keep emotions from sapping your energies to the point where you're always tired is to keep busy.

Nerve specialists find that many of their patients cease worrying only when completely absorbed by their work or avocation.

What about boredom? Does it exhaust us and literally "make us tired"? It does indeed. A half hour of acute boredom can burn up more nervous energy than a whole day's work.

But why is boredom so fatiguing? The answer is simple. Psychological tests have shown that boredom is always accompanied by **extreme** physical and emotional tension. And this, of course, is debilitating.

So if boredom is draining your nervous energies and making you feel chronically tired, you need to snap yourself out of it by cultivating new interests and broadening your horizons.

If you really try, you'll find so many things in this world to interest you that you won't have time to be bored—or time to fret and worry either.

(By 'John E. Gibson')

* * *

THEY CAN'T BE LEFT OUT

One of the pitfalls when writing complex sentences is those little words which it is all too easy to leave out. People often say: "This book is as good, if not better than, the other one," but a careful re-reading will show that it should be: "This book is as good as, if not better than, the other one."

The same sort of mistake is also common with verbs, e.g. "That situation always has and always will exist." The main clause of this sentence should be: "That situation always has **existed**" and the correct part of the verb must be included, so it is necessary to repeat the idea by saying: "That situation always has **existed** and always will exist." It would however, be all right to say: "That situation always did and

still does exist." or "...always did exist and always will."

It is a frequent error to omit part of the verb to be in sentences such as:

"The flowers were blooming and the sun shining." In a similar way to that worked out with the previous example, we cannot let **were** stand for both phrases here but must insert **was** in "...the sun **was** shining." Had **were** been the correct verb required for the second half of the sentence, then it would have been quite in order to omit it from the second phrase, e.g., "The flowers were blooming and the birds singing."

* * *

NEW WORDS—WITH CARE

Many words formerly used in one sense **have** by now undergone a complete metamorphosis, such as the adverb **presently**, which occurs frequently in Shakespeare's works meaning **immediately, at this present time**; whereas today, of course, it means not **now, at some later time**—almost the exact opposite. **Silly** used to mean simple in the sense of blessed or innocent, while on the other hand, **nice** had the now quite obsolete connotation of **foolish, wanton, extravagant**.

New words are being incorporated all the time into everyday vocabulary, and some of these are so recent as not yet to be found in any dictionary. A noun such as **astronaut** is probably here to stay, and is in fact quite a picturesque example for it means literally **sailor among the stars** (Greek **astron**, star and **nautes**, sailor). Some people have accepted this newcomer but seem less favourably inclined towards the variation **cosmonaut** (Greek **kosmos**, universe.)

But a spate of new words of a different and undesirable kind is reaching us from America. **Motorcade** is one which is not very pretty; it is, of course, a corruption of **cavalcade**, which signified originally a procession on horse-back.

The latest, which has aroused even an American senator in all his wrath, is to "**permanentise**."

Perhaps even worse than this is **comfortise**, seen in a magazine advertisement.

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GUIDE TO CAREERS: THE METEOROLOGIST

METEOROLOGY, a branch of the science of Physics, deals with the atmosphere and its phenomena.

As man has always been interested in **weather and climate** and their effects, with a view to avoid the effects of adverse weather and utilise changes of weather to his own advantage, study of Meteorology began hundreds of years ago. As a result of continuous researches and studies, meteorology is to-day a well-developed science which has many important applications in everyday life.

One of the basic requirements of a meteorological organisation is a network of surface and upper air meteorological observatories for recording observations of the various weather elements. The surface observatories record barometric pressure, temperature of air, humidity or moisture content of the air, direction and speed of the wind, the amount and types of clouds, visibility, rainfall, etc. Upper air observatories are of different types. For example, a pilot Balloon Observatory records the direction and speed of upper winds at various levels of the atmosphere, generally up to 20,000 to 30,000 feet by observing the drift of a hydrogen-filled balloon through an optical theodolite. A Radio Wind finding station measures the direction and speed of upper winds up to much higher levels of the atmosphere, often up to 50,000 feet by means of a small radio transmitter attached to a hydrogen-filled balloon which is tracked by a "Radio-theodolite" on the ground. The radio theodolite enables the upper winds to be determined even in cloudy, rainy or foggy weather. Then there is another type of upper air observation, viz., Radiosonde observation. A Radiosonde is a small instrument consisting of a light radio transmitter combined with devices for measuring pressure, temperature and humidity, which is lifted through the atmosphere through great heights, often 50,000 feet, by a large hydrogen-filled balloon. The radio signals from this instrument corresponding to the values of atmospheric pressure, temperature and humidity at different levels are picked up and recorded by a special type of receiver.

The various types of observations mentioned above are recorded at fixed times during day and night simultaneously at the different observatories. The observational data are entered by the meteorological staff in the form of a coded figure message adopted by international agreement and telegraphed to the Forecasting Centres. The messages are decoded and plotted on a

"weather map" in the Forecasting office. The area covered by a weather map is usually very large, extending beyond national boundaries, as international co-operation in meteorology has made it possible for different nations to exchange their observations by wireless as a matter of daily practice.

THE METEOROLOGIST has thus before him a picture of the weather pattern over a vast area, from which by applying techniques of physical reasoning in which he has been specially trained and other scientific principles of meteorology which he has learnt, he tries to decide in what way the weather will change over a given area.

The Meteorological organisation in India is maintained by the India Meteorological Department which was established in 1875 and which has now offices and observatories all over India. It has a basic network of about 380 surface meteorological observatories, 55 Pilot Balloon observatories, 12 Radio Wind finding stations and 13 Radiosonde stations. In addition more than 100 ships of Indian registration which have been equipped with meteorological instruments, serve as mobile observatories during their cruise and send their observations by wireless. There are 18 Forecast Centres of various types, six of which work on a twenty-four hour basis, where facts are collected, weather charts prepared and analysed, and forecasts are issued for aviation, shipping and various other interests.

Meteorological service to aviation is at present one of the most important applications of meteorology. An aviator has to be told in advance about the weather conditions he is likely to meet during his flight. Just before the commencement of a flight, the commander of an aircraft is supplied with detailed information about winds at various levels, cloud bases and tops, temperature, weather conditions, etc. He is also given a personal briefing by the Meteorological Officer when he explains to him, with the help of the latest weather charts, the prevailing weather situation, its anticipated development and the weather hazards on the way which he should guard against. When the aircraft is airborne, the meteorological officer keeps a watch on the development of weather conditions which is communicated to the commander of the aircraft by wireless, whenever necessary. At the destination aerodrome, the meteorological

EDUCATIONAL FORUM

CORRESPONDENCE COURSES AND EVENING COLLEGES

A provision of Rs. 1.40 crores has been made in the third Five-Year Plan for starting evening colleges and correspondence courses for the benefit of deserving students who fail to get admission for higher education in the universities and other recognised institutions.

The scheme tentatively prepared by the Union Education Ministry provides correspondence courses for 20,000 students in ten universities. The courses will be limited to Humanities only to start with. The evening colleges will cater to about 40,000 students including 10,000 wanting to study science.

An expert committee under the chairmanship of Dr. D. S. Kothari has already been set up to work out the details of the scheme.

The evening colleges and correspondence courses, it is stated, have been tried with considerable degree of success in a number of other countries. In Australia, for instance, these courses have been introduced at all stages of education and have been in existence for the last 50 years.

The universities starting correspondence courses will be asked to establish regular departments of correspondence studies and plan their courses in such a way that the same teachers who teach day scholars, and the heads of all departments become responsible for the standards of teaching and examination. The duration of study of students seeking education through correspondence courses may, however, have to be longer than that for the usual degree course.

The draft scheme also makes a provision for holding short-term residential schools for these students in order to bring them and the teachers together at least for some period.

As India has no experience in correspondence courses and clue is being taken from other countries, it is proposed to allocate at present more students to the even-

ing colleges which are relatively easier to start.

Facilities for higher education in one form or the other through evening classes already exist in 16 universities including Delhi, Jabalpur, Karnatak, Agra, Gujarat, Osmania, Bihar, Calcutta, Gauhati, Rajasthan, Bombay, Utkal and Punjab.

INTER-UNIVERSITY NUCLEAR CENTRES

The Department of Atomic Energy is considering a proposal for the setting up of two inter-university nuclear centres, one in North India and the other in the South, for encouraging research and providing facilities to university scientists.

This was understood to have been indicated at the meeting of the Informal Consultative Committee on Atomic Energy, held under the chairmanship of Shri Nehru in New Delhi on August 19, 1961.

The question of having a nuclear power station of Canadian design was raised at the meeting. It was understood to have been pointed out that the Canadian design would be more economical for India whereas the United States type of power station would require continued assistance and involve higher costs.

It was also emphasised that with India having the largest deposits of Thorium, nuclear power production would be based on thorium. Steps had been taken to carry out experiments on thorium.

SEX EDUCATION OF THE YOUTH

Dr. N. K. Sidhanta, Vice-Chancellor of Delhi University, said in New Delhi on August 7, 1961, that sex education of the youth should be humane rather than scientific.

He was presiding over a seminar organised by the Association for Moral and Social Hygiene in India at the Delhi School of Economics on "Sex Education and Students' Counselling."

Dr. Sidhanta said that the very purpose of sex education would be defeated

if it only related to the biological aspect. The education should seek to develop for the youth a healthy attitude towards sex.

He said, "sex relationship originates in romance." It should be remembered that creative arts like poetry, painting and music had their source in romance.

Dr. Sidhanta regretted that there had been a shift of emphasis from emotions to body in sex relationship, as depicted in pictures and books lately.

Referring to criticism that pictures corrupted the youth, he said there was nothing wrong with what the pictures depicted. The defect, he said, lay in the mode of presentation.

He said that cheap books and pictures sought to tickle one's emotions by presenting love scenes in a suggestive manner.

Mr. Samuel Matthai, Secretary of the University Grants Commission, said that a healthy and happy life of the parents and teachers was the best sex education for the youth.

The children were constantly watching their elders, he said. The way the latter lived was bound to influence them. The attitude towards sex was also influenced by the values a society respected he added.

Mrs. Raksha Saran, Chairman of the Women's National Education Board, said that the object of sex education was to train up the youth to be balanced human beings.

ISRAELI STUDENTS PUBLISH THEIR OWN TEXTBOOKS

One of the problems facing newly-developing countries in training the technical personnel they badly need is that of language. Textbooks are often available only in foreign tongues, and the task of publishing them in the national language is a costly business, making the books a heavy item in the students' budget.

Students at the Technion (Israel Institute of Technology) in Haifa decided to tackle this problem by publishing their own textbooks in Hebrew. In 1952, they set up a publishing cooperative and, with the help of their professors, they started to prepare textbooks based on the lectures in their course. Certain students were detailed to take very full notes, which the professors then edited and annotated. The manuals are thus closely linked to the lec-

tures of the various teachers at the Institute and, whenever a professor leaves, a new book is published based on the course given by his successor. The method has the advantage that the textbooks are frequently revised.

The Technion cooperative, of which each student becomes a shareholder on his arrival by purchasing one share, pays the professors a nominal fee for manuscripts based on their lectures. It is a non-profit-making body selling its textbooks to the students at cost price, generally 40 per cent cheaper than those produced commercially. It has to date published over 140 titles in the entire range of subjects taught at the Technion—all major fields of engineering, technology and applied science—and is now making plans to purchase new presses which will enable it to develop its activities.

THE UNIVERSITY OF THE THEATRE OF NATIONS

When a school is established in connection with a theatre festival it is always a sign that the festival has become an Institution with a capital I. The Theatre of Nations has attained this status in Paris. Its "University" opened on June 1 with 104 students from 28 countries. Most of them have had some professional experience as actors, designers or directors. Mornings are devoted to lectures and group discussions. The latter can become quite impassioned as Eugene Ionesco discovered when students from Eastern Europe, Spain and Latin America tried (unsuccessfully) to drive him into a corner and admit that his plays had a message. Afternoons are given over to practical work—attendance at rehearsals of the foreign companies taking part in the Theatre of Nations; visits to the design studios of the French National Theatres; or observation of the work of the stage hands and electricians preparing for an evening performance. Every evening is a busman's holiday. Free passes in hand, the students scatter to the many Paris theatres.

U.G.C. TO ASSESS EDUCATIONAL STANDARDS

The Union Government has asked the University Grants Commission to undertake an objective study of higher education to ascertain whether the standards had improved or fallen during the last ten years.

This was disclosed in the Lok Sabha on August 27, by Education Minister, K. L. Shrimali during his reply to the debate on the annual report of the U.G.C. marked by several members' concern at the deterioration in educational standards. Dr. Shrimali said that time had come when frequent criticism in Parliament and outside about the lowering of standards should be challenged.

He added that there had been a definite improvement in the standards and those who felt otherwise must come forward with concrete instances to substantiate their criticism. He strongly deplored the practice among certain people to run down the education system in the country.

Dr. Shrimali justified the restrictions on admission of students to universities and said in no country in the world the doors of universities were open to all kinds of students. The U.G.C. had rightly suggested that admissions should be on a selective basis, which alone could ensure higher standards.

He was, however, sorry that adequate opportunities were not available for students after they had passed out of the higher secondary stage. If these existed, at least 50 per cent of the students would not think of going to the university. As it was not possible to admit every student for higher education, some alternate opportunities had to be created for them.

While opposing "indiscriminate" admissions, Dr. Shrimali listed the various measures being taken to expand higher education. A provision had been made in the third Plan for 10 to 15 more universities in addition to the present 46.

NEW TECHNICAL INSTITUTES IN PUNJAB

At a special meeting on September 15, the Punjab Cabinet decided to provide additional facilities for free technical education for 10,000 students who will be mostly matriculates—regardless of division.

In an interview with Pressmen, Chaudhri Suraj Mal, P.W.D. Minister, said that the Government had decided to set up 20 new institutes each with an intake capacity of 500 students per year.

Estimated to cost Rs. 7.68 crores during the Third Plan period, these institutes would be located near small towns with a

population of 15,000 to 20,000. The process of establishment would begin from February next.

In these institutes it was proposed to arrange for technical training in various engineering trades, such as electrician turner, fitter, welder, moulder, radio mechanic etc.

The duration of the course will be 18 months in the institute and six months' practical training in a factory.

In addition to this, the Government also proposed to arrange for apprenticeship training for 3,000 boys by placing them with factories in and outside Punjab for an average period of three years.

A stipend of Rs. 40 per month would be paid to each of the trainees receiving training in a factory in Punjab and Rs. 100 per month to each of those placed in factories outside the State.

The scheme will cost Rs. 62 lakhs and trainees like the former would be mostly matriculates.

DEVELOPMENT OF HINDI IN THIRD PLAN

An allocation of Rs. 240 lakhs has been made in the Third Plan for the implementation of various schemes for the development and progress of Hindi. This information was contained in a statement laid on the Table of the Lok Sabha by Dr. K. L. Shrimali, Minister of Education, on September 4, 1961.

The schemes for the development of Hindi, outlined in the Statement, included among others the translation of standard works from the various languages into Hindi; preparation of dictionaries and encyclopaedias; popularisation of uniform terminology; production of cheap editions of popular books in Hindi, subsidization and free gifts of Hindi books; grants to non-Hindi speaking States for the propagation of Hindi and appointment of Hindi teachers in schools in non-Hindi speaking areas.

Other schemes included in the Third Five Year Plan programme included the establishment of a Standing Commission for Scientific and Technical Terminology, grants to Hindi organisations, revision of pay scales of Hindi teachers, training of teachers in Hindi and production of teaching material.

INCREASE YOUR KNOWLEDGE

(In this feature we publish interesting and factual topics which increase the general knowledge of the readers.—Ed. C. & C.)

SEVEN WONDERS OF THE WORLD

One is frequently tempted to call, something that appears unusual or extraordinary "the eighth wonder of the world," but how many will be able to enumerate the Seven Wonders?

How many know the fact that of the Seven Wonders one only has survived? It still stands erect and claims our undying admiration.

It was constructed thousands of years before Greek authors recorded its existence—the Pyramid of Cheops, relic of ancient Egypt. Of the others, all trace disappeared long ago.

To this day the Pyramids of Egypt are probably described by guides in much the same terms of admiration which the Greek historians used 2,000 years ago. But new facts have since been discovered which only add to the wonder which we feel when thinking of the Egyptian civilization.

Two British scholars, Taylor, a publisher, and the Scottish astronomer, Smith, have taken careful measurement of this largest pyramid, and have come to the conclusion that there is more in it than meets the eye—although what meets the eye is plenty.

Mr. Taylor and Mr. Smith maintain that dividing the length of one side of the pyramid by the number of days in a year, the result we get is a unit of measurement which if multiplied exactly twenty million times is the length of axle of the earth.

From this fact the British scientists drew the conclusion that the old Egyptians knew the globular nature of the earth and their astronomers were acquainted with its dimensions, using them in a symbolical manner when erecting the pyramid.

We have no occasion to verify the glowing descriptions of ancient authors concerning the second of the Seven Wonders, the Hanging Gardens of Queen Semiramis.

It was constructed upon an artificial

platform almost a 100 feet above the foot of the hill of Babil. Poor villagers build their mud huts and plant their gardens on terraced projections to this day.

The temple of Artemis in Ephesus was burnt to the ground in the year 536 B.C. by Herostratos.

In its place the Ephesians immediately started to build a new one, and it took them about 130 years and a prodigious amount of money to complete.

All this did not prevent Constantine the Great, the Emperor of Byzantium from cheerfully destroying it, some seven hundred years later.

The fourth of the Seven Wonders seems to have been one which certainly deserved its fame also as a work of art, although the points noted about it do not refer so much to the perfection of the sculpture as to the colossal size and costliness of the Zeus statue erected in Olympia.

It was the work of Pheidias. The seated figure of the chief god of the Greeks was 40 feet in height. Figures of horses were grouped around the throne which was inlaid with gold, ivory and gems.

The Colossus of Rhodes was really a statue of the sun god Helios which had been erected by the Rhodesians to stand astride the entrance of their harbour.

The statue stood over 10 feet in height and had been cast in metal by the sculptor Chares. The work took 12 years to complete and was finished in 285 B.C. Fifty years later the wonderful statue was destroyed by earthquakes.

The debris were not removed, nor was the Colossus erected again, since the oracle which the Rhodesians consulted on the point decreed that everything should be left as it was.

The sixth of the Seven Wonders was the lighthouse built on the tiny island of Pharos, off the coast of Alexandria. Obviously, it was the 'biggest and the best,'

lighthouse of antiquity, and its fame has come down to posterity.

If we may believe contemporary authors it rose to the prodigious height of 500 feet and cost 800 talents—though how much exactly translated to our currency that may have been it is difficult to calculate.

Anyway, the builder, Sostratos of Knidos, would have had every reason to be proud of his work had he known that the Pharos, completed in 283 B.C. still stood in the 14th century A.D. We ignore how and when the grand edifice was destroyed.

The Seventh Wonder, like the first, the Pyramid of Cheops is a mausoleum. To it, we owe the word "mausoleum" (used for a grave vault in nearly all modern languages). It was the memorial erected by Mausoleus, ruler of Kariam, over the remains of his wife Artemisia, at Halikarnassos about 350 B.C.

It was 450 feet in circumference and several tiers of pillars bore a cupola rising to a height of 160 feet.

The mausoleum of Halikarnassos was like the Colossus of Rhodes, destroyed by an earthquake in the 13th century. Crusaders used part of its material for the building of a castle.

In 1857 the English archaeologist Newton excavated some of the statues and reliefs which formed a part of its decorations.

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MAGSAYSAY AWARDS FOR 1961

The 1961 Magsaysay award for journalism and literature was presented in Manila on August 31, 1961, to Mr. Amitabha Chowdhury, 34-year-old, Assistant Editor of the Calcutta vernacular daily "Jungantar", for his crusading work.

Accepting the award, worth \$10,000 Mr. Chowdhury said it had focussed world attention on the work being undertaken by Indian journalists to champion the cause of the masses.

Other recipients of the Magsaysay awards—which have been given to outstanding men and women in Asia for the past three years—were a British refugee worker, an American blind teacher and an Indonesian doctor.

The blind American teacher, Miss Genevieve Caulfield, has been given the

\$10,000 Magsaysay award—Asia's Nobel Prize—for international understanding.

The Magsaysay Foundation, which commemorates the Philippines' first President, Ramon Magsaysay, who died in 1957, cited 73-year-old Miss Caulfield for her work for the blind in Japan, Thailand and South Vietnam.

Miss Caulfield, blind since early childhood, first went to Japan in 1923, and now commutes between Japan, South Vietnam and Thailand.

* * *

HOW STAMPS ARE MADE

One of the world's largest manufacturers of stamps is the British firm of Thomas De La Rue, which began making stamps in 1855 and since then has supplied over 150 different countries with their complete issues. An interesting glimpse into the imagination and skill that goes into the production of these minor works of art was given recently by designers, engravers and other workers at the De La Rue factory in the City of London.

Although some of their customers like the comparatively recent photogravure process, De La Rue's specialises in the direct-plate printing process, which it is generally agreed produces a more beautiful stamp, relying on the skilled eye and hand of the engraver to give greater depth, tonal variation and perspective.

The choice of subject is, of course, most important. Many excellent designs are provided by the postal authorities of the countries concerned; some are the result of competition; others are suggested by De La Rue's themselves. But in every case the reproduction of detail in the final stamp size is always a prime concern.

A designer explained that maps, for example, were in general unsatisfactory because of the difficulty of reducing the great amount of detail to stamp size. Pictorial stamps were both better and more interesting. The subjects, of course, had to be immediately recognisable as representative of the country concerned, and acceptable to that country. After careful research to ensure that the various subjects to be reproduced are exact and perfectly understandable, a full-scale picture of the design is made, which is then copied down to stamp size by an artist. This delicate job enables the customer, to see exactly

what the completed stamp will look like, and also provides the 'blue print' for the engraver to work from.

It is the job of the engraver to transmit this original painting on to a piece of steel. To do this he will probably take a photograph about eight times the stamp size which he will 'scribe' in outline only on to a large piece of zinc. With the pantograph—a machine which reduces the image or design down to the required size—he transmits the outline on to a small piece of steel which will eventually become the original die from which the printing plates themselves are made. Having the outline he needs, he then proceeds to engrave in a combination of deep and shallow cuts, long and short dots, and smaller inter-dots to produce a tonal range unsurpassed by any other method. The closer and deeper the lines, the greater the density of colour in the final stamp.

When the engraver is satisfied, the die is hardened and passed to the transfer department where the printing plate is made, by a process of rolling a soft-steelled cylinder under pressure over the die until the work on the latter is transferred in relief to the cylinder, and this impression is in turn transferred under pressure to the printing plate.

During printing a careful watch is kept to ensure, first, that the uniform colour is maintained, and second, that no marks are caused by damage on the printing plate itself. The slightest fault either in printing, or in the final process of perforation, gives stamps an enormous value for collectors, and every sheet is carefully examined before being packed and sent to customers all over the world. A set of four of each new Commonwealth issue is sent to Her Majesty Queen Elizabeth.

VISION OF WORLD IN 90 YEARS' TIME

A depressing and terrifying vision of the world in the year 2050 was foreseen by the world health expert, Professor Herman Baity, speaking at the Royal Society of Health Congress in Blackpool.

He foresaw a world—only 90 years hence—lacking food, clean air, water and energy, with standing room only for its thousands of millions of inhabitants.

World population had increased from a mere 1,000,000 people in 10,000 B.C. to the

present day 2,900,000,000. In 2050 it might reach 9,000,000,000.

At that rate there would be about a square metre of land for each of the world's inhabitants and, Professor Baity added: "Prospects of settling any substantial part of our population on other planets are not too bright."

He forecast that the world of 2050 would be without the domestic animals familiar today: these ate too much of the food needed by man and would have to be destroyed, being replaced by pills containing body-building ingredients.

The use of energy, he pointed out, had increased even faster than the population. Half the coal ever burned had been consumed in the past 40 years; usable resources of coal, oil and natural gas would be almost finished by the end of the next century. "Within the short span of 250 years the earth's citizens have used what it took nature 250,000,000 years to make," he said.

Uranium and thorium might provide the nuclear energy to enable civilisation to continue for a while. But even these resources would run out in time.

The alternatives, solar energy and atomic fusion, could provide boundless reservoirs of energy, but the means of tapping them were not yet known.

The earth's metal reserves would be used up within the next 100 years, only 30 per cent of land was suitable for cultivation and only 10 per cent was being used. Meanwhile, water was running short; thirst was a new problem many population centres would have to face.

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GERMAN BEST-SELLER

The German version of "The Diary of Ann Frank", published in a pocket-book edition by a Frankfurt firm, had reached its 778,000th copy in June this year. This is the largest edition of any pocket-book published in Germany since 1945.

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MOSCOW PRIZE FOR INDIAN PHOTOGRAPHER

At the international photo contest "Youth of the 20th Century", sponsored by the newspaper **Komsomolskaya Pravda**, the first prize (300 roubles) went to a Japanese photographer, Hiroshi Kawashima, for his picture "Youth Will Not Be Broken". This

picture shows a clash between an anti-imperialist youth demonstration and armed police.

The contest, which lasted three and a half months, drew more than 3,000 entries. They were published in **Komsomolskaya Pravda** and exhibited during the World Youth Forum in Moscow.

Three second prizes (200 roubles) awarded to Peskov of the USSR for "Vostok I On the Landing Run" Garcia of Cuba for "Learning To Read", and Dhanra of India for "Dam".

Six third prizes have been awarded to photographers of Great Britain, Brazil, China, Korea and the Soviet Union. A number of contestants from India, Rumania, the United States, the German Democratic Republic, Czechoslovakia, and the USSR were awarded consolation prizes.

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WATUMULL AWARDS FOR 1961

The Watumull Foundation of the United States has conferred the Watumull Memorial Award on Mrs Kamaladevi Chattopadhyaya, President of the Indian Co-operative Union.

The list of awardees in various fields was announced on August 17, 1961. The awards will be formally conferred on them in February 1962. Besides the citation, the awards also include a sum of Rs. 5,000 (or \$1,000) to each recipient.

The award has been made to Mrs Kamaladevi Chattopadhyaya in the field of socio-economics for "reviving and upgrading the handicrafts of India and for improving the economic condition of large numbers of India's weavers, artisans and artists through the establishment of co-operatives under her direction as President of the Indian Co-operative Union."

The other awards are:

Sciences (Medicine): Mr Bal Krishna Anand, Professor of Physiology, All-India Institute of Medical Sciences, New Delhi.

Agriculture: To be divided between Mr Lal Behari Singh, Director of the Government Horticultural Research Institute, Saharanpur, U.P., and Mr. Boshi Sen, Director of the Vivekananda Laboratory, Almorah, U.P.

Microbiology: Mr Sachimohan Mukerjee, senior scientific officer, division of

microbiology, Indian Institute for Biochemistry and Experimental Medicine, Calcutta.

Biochemistry: Mr Krishna Kumar Tewari, assistant professor of biochemistry, Lucknow University.

Family Planning: To be divided between Lt.-Col. B.L. Raina, Director, Division of Family Planning, Ministry of Health, Government of India, and Mr Narayan Agarwal, Chief, Demographic Research Centre, Institute of Economic Growth, Delhi University.

Humanities (Journalism): Mr Enver Ahmed of the Hindustan Times ("his work in library science").

The Watumull Foundation was established in Honolulu in 1942 by the late Gobindram J. Watumull, who went to Hawaii from India in 1927 and later developed various Watumull enterprises.

The Distribution Committee of the Watumull Foundation of Honolulu, Hawaii, announced in 1960 the establishment of 10 annual awards in memory of Mr. Gobindram J. Watumull to Indian nationals who have distinguished themselves by outstanding original research or service in any of the following categories in the year prior to the award:

Medicine, biochemistry, microbiology, physics, agriculture, astronomy, mathematics, nutrition, education (including adult literacy) journalism, economics, sociology, social welfare, architecture, family planning and community leadership.

Colleagues and professors of candidates, civic leaders, professional societies and established experts in the various fields may nominate a candidate, who must not be related either by blood, marriage or adoption to the nominator.

"I think that it adds to a woman's charm to have a trained mind. Men may not find it so attractive, because she does not find it so necessary as she did in the past to rely upon flattering a man. But if you look at the divorce rate among the various sections of society, you'll find that the divorce rate among professional people is very low." —Dr. Edith Summerskill

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What is history but a fable agreed upon. —Napoleon

FILM WORLD

VENICE FILM FESTIVAL AWARDS

A Controversial, "Fourth dimension" French film won the top prize in the twenty-second Venice Film Festival.

The movie was "L' Annea Derniere a Marienbad" ("Last Year in Marienbad"), a puzzling story "merging the past, present and future in four dimensions," directed by G. Alian Resnais.

It has been described by M. Resnais as "an attempt at a new exploration of the human condition." He and the film's writer, M. Alain Robbe-Grillet, denied at a Press Conference that it bore any relationship to the works of Proust and Kafka. They said the audience needed to give way to flow of imagination to enjoy the film.

It was the fifth French film to win the coveted "Golden Lion of St. Mark" award since the end of World War II.

A special prize went to "Mir Vojacemu" ("Peace to those Entering"), a Soviet film directed jointly by two youths, Alexander Alov and Vladimir Naumov.

Toshiro Mifune, of Japan, won the best actor award for his role in "Yojimbo." France's Suzanne Flon was judged best actress for her performance in the Yugoslav film, "Tu ne Tueras Point" ("Thou Shalt not Kill") directed by Lalande Autant Lara.

The prize for the best film by a newcomer went to Italy's Vittorio de Seta for his "Bandit in Orgosolo)."

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FILM JOURNALISTS ASSOCIATION AWARDS

The Herishikesh Mukherjee directed "Anuradha" was adjudged the Best Film of 1960 by the Film Journalists' Association of Bombay. The award was presented to the director at the Sixth annual award distribution function of the Association held at the Birla Matushri Sabhaghar in Bombay. The movie also won two more awards—for "best story," (Sachin Bhowmick), and for "best dialogue" (Rajender Singh Bedi).

Dilip Kumar was chosen the "best actor" for his role in "Kohinoor," while the "best actress" award was bagged by Madhubala for "Mughal-E-Azam." M. Sadiq was

given the "best direction" award for "Chaudhwin Ka Chand."

Shanker and Jaikishan were presented with the award for their "best music" scored in "Dil Apna Aur Preet Parai," while the "best play-back" singer awards went to Mohammad Rafi for his performance in "Chaudhwin Ka Chand" (male) and to Lata Mangeshkar for "Dil Apna Aur Preet Parai" (female).

Motilal was adjudged the "best supporting actor" for his performance in Bimal Roy's "Parakh," while the "best supporting actress" award went to Kumkum for "Kohinoor."

Other awards for distinctions were as follows:

Best lyrics—Sahir Ludhianvi for "Bersat Ki Raat," Best cinematography—R.D. Mathur for "Mughal-E-Azam," Best sound recording—S. N. Modi for "Kohinoor," Best dance direction—Lachhu Maharaj for "Mughal-E-Azam," Best art direction—M. K. Sayed for "Mughal-E-Azam," and Best film editor—Dharamveer for "Mughal-E-Azam."

Thus "Mughal-E-Azam," which gets four awards out of sixteen set for Indian films, won the maximum number of awards.

"The Cranes Are Flying" was adjudged the Best Foreign film.

More than half of the award-winners, including Dilip Kumar, Madhubala, Lata Mangeshkar and Mohammad Rafi did not attend the function

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PAKISTAN RECOMMENDS BAN ON INDIAN FILMS

A total ban on the import of Indian films into Pakistan for five years has been recommended in its report by the Film Fact-Finding Committee, appointed by the Government of Pakistan in March last year.

Another recommendation is for the doubling of the number of the country's cinemas (now numbering 390) "with full facilities to film-goers in all seasons."

The Committee also has recommended the establishment of a National Film Development Corporation, "empowered to take

all measures it considers fit" for the development of the film industry in the country.

The Committee has recommended a wide scope of working for the Corporation: besides financing production and looking after the development of the film industry, the Corporation should also supervise the marketing of Pakistani films both at home market and abroad, it is urged.

The Committee has recommended the ban on Indian films (Urdu, Punjabi, Sindhi and so on) keeping in view that more protection is essential to develop the national film industry, it is said. The entry of Indian films, even on a restricted basis, is considered harmful since, because of this, local financiers, distributors and even exhibitors refuse to invest in and patronise the local industry. The import of Indian films has led to "malpractices," the report says.

* * *

CENSORSHIP OF CINEMA POSTERS

A proposal to introduce a system of censorship of cinema posters in order to eliminate obscene ones is believed to be under consideration of the Government.

The high-powered committee on the subject held a meeting in New Delhi on September 7, under the chairmanship of Mr. Morarji Desai.

The committee is understood to have considered various alternative proposals to stop display of such posters.

The issue was raised by Acharya Vinoba Bhave, the Sarvodaya leader, sometime ago and since then a band of workers had been propagating the necessity of eliminating obscene posters.

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BILL TO CHECK FILM JOURNALS

A Congress member of Parliament P.N. Rajbhoj introduced in the Rajya Sabha a Bill to amend the Young Persons Harmful Publication Act, on Aug. 18.

The Bill seeks to check publication of cinema magazines which "exert a great deal of bad influence on the immature minds of young persons and tend to corrupt their morals."

* * *

YOUTH SOCIETY FOR FILMS

The Youth Society for Films, one of the five projects of the Federal Council of Youth, was inaugurated by Mr. Lal Bahadur Shastri, Union Home Minister, at Kamal Studios in Bombay on September 10. Mr.

Y. B. Chavan, Chief Minister of Maharashtra, presided.

A Press statement issued on August 28 at the headquarters of the Federal Council of Youth in Delhi said that an independent organisation of the youth was formed there as early as November 19, 1959, with the aim of solving the basic problems confronting the youth.

With this view, the statement said, the organisation sought to encourage young men in their own field of interest and to provide them necessary guidance and initiative without any consideration of territorial, social or political jurisdiction.

The organisation has chalked out five projects to provide youth with some constructive work and to help them at the same time to choose careers of their own choice. The five projects are: 1) The Youth Society for Films (Bombay), 2) Youth Society for Relief and Vocation Guidance (Allahabad), 3) Co-operative Printing and Publishing House (Gwalior), 4) Industrial Youth Co-operative Society (Madras) and 5) Youth Society for Resurgent Nations (New Delhi).

The first project, namely, Youth Society for Films, proposes to build up public opinion in favour of suggestive and purposeful films and shall establish a library in Bombay.

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INDIA SECOND IN FILM PRODUCTION

The greatest number of feature films produced in 1959 was by Japan (500), followed by India (312), the U.S. (288), and Hong Kong (246), according to a U.N. year book.

World consumption of newsprint in 1959 was about 13 million metric tons of which the United States counted for half, the year book said.

The next largest consumer was Britain, the year book added, followed by Japan, France, West Germany, Canada, the Soviet Union, Australia and Italy.

The year book said nearly half the books published in the Soviet Union related to applied sciences, while in Britain and the U.S. the majority of books concerned literature and the arts.

When a man does not know what harbour he is making for, no wind is the right wind.
—Seneca

Readers' VIEWS

PROHIBITION AND OUR DUTIES

Sir,

We are independent. We have both the fundamental and civic rights, and rights imply duties. We must, therefore, do whatever we could, for the Government. It is our duty to realise this responsibility. As a citizen, one must do even at the cost of his life for Government in case he is called upon to do so. If anything is prohibited for the good of ourselves and the nation as well, it is our civic duty to obey the same. Our duty does not end here. We must too, devise ways and means for the successful achievement of the campaign.

Before the Second World War, the Congress, when came to power in some of the Provinces, introduced 'prohibition' on intoxicating drinks and drugs. This ideal move could have safely been extended over the whole country within a short period had there been no Second World War. After the first mile-stone of India in the journey of liberation and world peace, Bombay is the first Province to revive the prohibition introduced earlier. In the Excise Ministers' Conference held at Delhi in the third year of Independence it was resolved to prohibit opium completely within ten years i.e. by 1960 in accordance with the article 47 of the Directive Principles of the State Policy laid down in our Constitution. In its report the Prohibition Enquiry Committee had also recommended some measures to be taken condemning the intoxicating drinks and drugs. Is this all a mere campaign? No, certainly not. Such prohibition was an important item of Bapuji's national programme for the elimination of poverty, gambling and other unspeakable evils of our societies. It is, above all, a moral issue. Therefore, "I hold drink" said Bapuji, "to be more demnable than thieving and perhaps even prostitution". But it is shameful, such an ideal move has yet to bear fruits. Why? We will be blind for the reasons. But this is greatly due to our non-cooperation with the campaign of prohibition initiated by Government.

We know, drinking is socially undesirable and very often it leads to the physical,

mental, moral and material ruins of the drinkers; we know wine is the enemy of freedom. But still, it is shameful, the number of persons being addicted to drink has considerably increased.

Some may argue with the point that this prohibition is a curtailment of individual liberty. This is completely wrong. It weakens the drinker's will power and makes him completely blind to his own improvement as well as his family's interests. In fact, it ruins the drinker's life. Prohibition will certainly help to increase savings and capital formation by which we would be able to spend more money after our comforts on which taxes are being levied. This apart, the loss of such revenue is not so much that our Five-Year-Plan would suffer. This can be made up through enhancement of other sources of revenue, which we, for the good of nation, will surely welcome. We hope one fine morning will come to see no poverty, no gambling, no prostitution, nothing of this sort in our country and as a result our path of accomplishing the goal of our life will be strewn with roses.

(Benudhar Purohit, Bolangir)

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A CRUSADE AGAINST THE INDECENT POSTERS

Sir,

It is indeed heartening to note that Acharya Vinoba Bhave has launched a crusade against the indecent and lewd cinema-posters. The step is a good one and deserves appreciation and co-operation from those who are anxious to see all people lead a healthy and pure life in the society.

The people, engaged in the production of films, have come forward openly to criticize this step of Acharya Bhave. Even the film-magazines in their respective editorials, have made a sharp and pinching criticism of it. It is very shocking that the lure of lucre should have made these people so much intoxicated that now they cannot distinguish even between bad and good. In the name of art, they are doing things that are highly obnoxious from the viewpoint of the people's welfare.

Acharya Vinoba is a great personality—a crusader of indefatigable zeal. He knows well what is bad and what is good for the society. He, like any other well-wisher or reformer of the society, realises that the indecent and lewd cinema-posters—displayed in every nook and corner of our cities including developed villages with a view to alluring the people to see films—arouse premature sex feelings among the young and immature people. These help in undermining and even ruining their minds and character, and bring about a number of venereal and sexual diseases.

It may be stated here that it is quite natural that when one sees an obscene or unhealthy picture or poster, some inhibition in a corner of one's mind is broken—especially, in the minds of the young and the immature. In the beginning the imitation they make may be confined to dress and mannerism only. But by and by, it creeps into the behaviour. It does not mean that all people are affected as such. But undoubtedly many people, especially the young and the immature, are affected. And in this way, as Mrs. Lilavati Munshi puts it, "denis in the protective armour of norms of behaviour are produced".

The bulky number of film-magazines—which are sold away mainly because they are full of alluring pictures of the film-actresses in sexy poses are largely responsible for the ruination of the young brains. And therefore, these should be condemned and boycotted.

(Rajendra Prasad Goswami, New Delhi)

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THE FEVER OF STRIKES

Sir,

Now-a-days the fever of going on strikes and fasting unto death has probably reached its climax. When we face any problem however complicated or simple, the first thing that comes in our mind as the key to every problem, is either strike or fasting unto death. It has become a child's prank to threat the government or the administration. One simply fails to understand the logic behind this antic. It is our own land and our own government then why should we commit ourselves to such follies. Besides there are ways of doing things. We can easily do representation and can send deputation to the government to look after our demands.

The first thing that we should do

before embarking on these ventures is to think twice. Dealing with the problems of provincialism, language, race, caste and creed and so on, is not the only job for any government. There are always problems more acute and urgent than these facing the government and are of far more importance than any of these homely problems. As a matter of fact, these minor homely problems have no more significance than the old wives tale. It is very easy to get excited over trivial matters and launch a rally or a strike or a fasting unto death programme with gusto. It only proves our own impertinence and lack of civic sense plus the duty of a good citizen. On the contrary, we must co-operate with the government and administration to provide a better scope of living to every Indian citizen.

The present time is a time of various crises and the world is on the brink of fatality and anything that a country needs at such times is the peace in their own lands. But unfortunately it only seems to be a utopian dream. In our own land there is a tumult over various problems such as demand for punjabi suba and so on.

The fast unto death by various leaders is no key to these problems. In fact, it leads to one unhappy prospect, that is diversity in unity instead of unity in diversity. We must look on every point before doing such things as strikes and fasting unto death as it is no more a pleasant solution to these problems.

It is commonly argued by the leaders who fast unto death that it is a weapon given to them by the Father of the Nation—Gandhiji. And that they considered this 'fasting unto death' as the panacea for all the evils. So whenever people feel a little distressed over something, they resort to this weapon. But we would like to say that the purpose behind Gandhiji's fasting was entirely different. He never fasted against the Congress, though he had to quarrel over many other matters. Further, we are sure that were Gandhiji alive today, he would have surely found out some new method to get the difficulties removed. Let us now, as his sons, try to find out the new method, if possible, and not resort to this old, hackneyed method which was adopted for entirely a different purpose.

(Nazim H. Khan, Shahjahanpur)

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AN UNPARDONABLE IMPERTINENCE

Sir,

Lord Home will discipline our Prime Minister Nehru by his indisciplined tongue. What an unpardonable impertinence? It seems a section of the British people has not yet been free from the decrepit, worn-out, rotten psychology of 'White Man's Burden' that caused our blood and tears to flow galore only two decades back. Now when the days of colonialism are over, Lord Home will have us to believe in the invincibility of his sermons preached as a Free Citizen of London, if only, to give some political enlightenment to our Prime Minister who, according to the said preacher, needs to be tutored on the principle of non-interference in the internal affairs of sister Commonwealth countries. A mighty joke indeed! Lord Home should be thankful to the Indian Press because a latter's silence to his monstrously frivolous and atrocious remark.

We cannot but recall in this context how only a few years back an allegedly 'intemperate editorial' published in the fortnightly A.I.C.C. Economic Review with reference to Queen Elizabeth's visit to Portugal created a furore in the British Press and how as a result apologies had to be offered to the Queen in desperate succession by our Congress stalwarts including Prime Minister. That pretty insignificant incident was climaxed by public denunciation of the unfortunate editor, contrary to all journalistic etiquette. It is hard to resist the temptation to quote few lines published in the Daily Telegraph delivering personal attack on our Prime Minister in connection with that erstwhile editorial. "Mr. Nehru's mind", wrote Daily Telegraph "has never been very easy to fathom. We have borne with patience the inconsistencies of his attitude to British policy and to unity within Commonwealth. . . . Mr. Nehru's followers must realise that from no one-friend, half-friend or enemy will we endure personal attacks on the Queen. Cobras disgust even when their stroke goes wide".

Without using any intemperate language in the manner of Daily Telegraph, we would like to let the British people know that Prime Minister Nehru is not less honoured by his countrymen than their Queen, and that any aspersion cast on him shall be regarded by us as a national insult. We hope, Lord Home should be wise enough

to realise this sensitiveness of the Indian people who find in Nehru not only a leader of the ruling party but a mighty symbol of India's hope, aspirations, pride and honour.
(Amar Nath Jha, Malda)

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A PLEA FOR USE OF ENGLISH

Sir,

In the August 1961 issue of Careers And Courses, I read the article "A Plea For Use of English" by Reginald Massey. But sorry to find that the author has appealed to use English at the cost of our national character. For national character is essentially represented and vividly reflected by our mother language and the related national outlooks descending hereditarily from centuries behind in the bulk of the population. When only 2 per cent of our people know English and when we are striving hard to model our Indian culture unique in the world, then it would be too bad to lay stress on or plea for the use of English.

It is good to know English as well as other prominent languages of the world. But it would certainly be a slave mentality to ignore the mother language. This is because of the intimate infusion of one's mother language in his flesh and blood and spirit that one is only able to play his part successfully in any of the world affairs through the medium of his nationally inherited qualities.

In the light of present language conflicts, a very few pleaders of English, among the great majority of non-English knowing Indians, have got the chance to make a plea for the use of English in the name of national unity. To such pleaders it can be said that ultimately one of the Indian languages has to present the solution and not the foreign language. Two hundred years old English can never replace the centuries old regional languages. To use English by the 2 per cent western-fashioned Indians in everyday life means to hate and disrespect the 80 per cent population of India which is quite unacquainted with the language.

Undoubtedly, during the period of the change of medium, educational standards may show a little apparent fall. But very shortly the standards will come truly to the international level as the mental capacity is increased when the medium of education is one of the national languages.

(Umesh C. Chandra, Moradabad)

AN ANSWER TO 'COMPLEXES'

Sir,

The psychology of inferiority and superiority complexes plays a vital role in human nature. Man is said to be selfish by nature. Does this selfishness stimulate the concept of either complex in him or whether these complexes are developed as a result of his economic and social standing? Although no certain answer can be given to this query yet we can assert that in a majority of cases both these complexes spring up within the man when he stands viewing dark side of his environments. Even a man of superiority complex sees no bright side of things, for he fears the rivalry of people of inferiority complexes. So the conception of either complex emerges from one's internal environment that he perceives within his mind.

It would be wrong to claim that both these complexes are exclusively predominated by our economic and social conditions. If we admit this point of view then it means that a rich man shall have superior control or influence over a poor man whose inferior complex is due to his weak financial and social position. But it is not always true, because in certain cases, a rich man also suffers from this weak complex due to his inability to stand match to his poor rival, whose possession of a number of good traits fails the former to cope with his internal environments. So the superiority complex is also not a perfect complex, which one should attain after relegating one's inferiority complex.

The conflict of these two complexes shall, however, continue until we have acquired a superiority complex to the extent that we feel neither any superior-being nor any inferior-being to ourselves. This so-called complex is a perfect one and it may be defined as 'equal complex' which is a big key to develop our independent ideas and thinking. To attain equal complex we need inculcating a sense of confidence and initiative in us.

(Amrit Chadha, Simla)

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WAR—AN UNMIXED EVIL

Sir,

Every one person condemns the belligerent attitude of the nations of the world, but one significant aspect of this matter is that every country's unity grows stronger

day by day. It is seen in the history of nation, as in the case of man, that development takes place when opposition is sterner. Country like Mexico which has not seen much of war, draught etc. has not made great strides in progress. It is therefore said that war is not an unmixed evil. It has its own advantages. Look at the conditions obtaining in America and Russia. Economically, socially, scientifically each is vying with the other to exhibit each one's strength greater than the other. In conditions of peace could we be able to become cosmonauts and make a missile go far a distance of over 8000 miles? When peace will prevail these will doubtlessly be used for human welfare as the inventions of First and Second World Wars are used today making the world more advanced than before. Rockets may be used for carrying our letters and messages across Atlantic and Pacific Oceans. A spaceman will give timely call to save our entire world.

When all is said and done, pray God that while tension of war may continue, but nations should not come to loggerheads by folly to bring our very existence on earth at stake.

(Radha Benode Mukherjee, Bhadrak)

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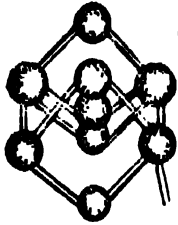
PAST—A WARNING TO THE PRESENT
Sir,

The caption entitled "Need to Develop National Consciousness", published in your Sept. issue, revealed the foresightedness of its author Dr. K. L. Shrimali, Union Minister of Education. The breathless spirit of oneness which pervaded the minds of the Indian youths in the pre-independence days is gradually eliminating but certainly giving rise to many problems like, communalism, linguism etc., in the post-independence days, which are undoubtedly humiliating the happy rehearsal of oneness, which had only germinated before independence. The author very clearly pointed out in this article the unity in diversity in Indian culture.

(Subhash Chandra Mukherjee, Purulia)

Marriage should improve the human species, becoming a barrier against vice, a protection to woman, strength to man, and a centre for the affections.

—Mary Baker Eddy



SCIENCE

& INVENTION

ION ENGINE FOR TRIPS TO PLANETS

Tests of an ion engine for long-voyage space craft now being developed in the United States will commence late in 1962 according to present plans, the U.S. National Aeronautics and Space Administration (NASA) announced.

The ion engine is designed for the propulsion of space ships that will make the incredibly long voyages to far-distant planets. Scientists and engineers now working on the engine are already thinking in terms of ion-propelled space craft designed to make the 20-year-long, 3,600 million-mile (5,760, million-kilometer) trip to Pluto, the outermost planet of our solar system.

For trips to Mars and Venus, either a chemical rocket engine or an ion engine could be used, rocket designers say.

"But when you go beyond these planets," says Marshall P. Ernstene a physicist now working on ion engine design, "the ion engine wins out over the chemical rocket hands down. After all, no known chemical rocket can get you to Pluto."

Amazing though it may seem, the ion engine is regarded as entirely practical by today's space planners. The United States Government is now encouraging large-scale research efforts at 17 different laboratories.

When in operation, the ion engine expels charged particles (ions) that are accelerated by electric or electromagnetic fields. As the ions flow from the rear of the engine, they propel the engine forward.

In more technical terms, the engine consists of a propellant such as cesium, a tungsten surface, and electrodes for applying an electric current. The cesium propellant is ionized when it contacts the heated tungsten surface; that is, negatively charged electrons are removed from cesium atoms, leaving a positively charged particle known as an ion. Collectively, the ions form an "ionized gas."

Because this gas has charged, it can be accelerated and made to flow that of the rear of the engine at ultra-high velocities, such as, for example, 100,000 feet (30,000 meters) a second.

The ion engine does not develop as powerful a thrust as does a chemical rocket. Nor does it need such a powerful thrust, for it is not designed to launch a space ship upward through the dense Earth atmosphere, but to propel it for long periods at high speed through the frictionless vacuum of space.

Thus, an ion engine with a thrust of only one pound could propel a 5,000-pound (2,250-kilogram) space craft through space at a speed of 15 miles (24 kilometers) per hour after 60 minutes. By the end of the first day of cumulative acceleration, however, the speed would be 375 miles (600 kilometers) per hour. At the end of a month it would be travelling at 11,000 miles (17,600 kilometers) per hour.

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PLASTIC BRICKS

Plastic bricks introduced by a North England firm will, it is claimed, provide houses to outlast those traditionally built with bricks and mortar. The bricks, which have been patented are made of chemically fireproofed polyester fibre bonded to a central insulated material or unconnected molecular structure. They can be so treated that the colour scheme will last the life of the house.

It is believed that the price of a house built in this way will be more or less the same as that of a normally built house. Heating costs are expected to be lower because of the use of insulation material, and the electric wiring and water pipes can be incorporated in the insulated skin.

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SURVIVAL FOOD BARS

A tiny, candy-like food bar, smaller than a pocket-watch, has been developed at Kansas City (Missouri) to serve as a key ration during the panic period that may follow an atomic attack.

Its development was reported by the Mid-West Research Institute, which recently perfected the household alarm warning system for civil defence.

The bar, about an inch square and half an inch thick, is about 60 per cent wheat, with other ingredients including dry beans.

Each bar contains about 65 calories of normal daily food requirements for an adult.

Two institute chemists recently lived for two weeks on nothing but these survival bars.

An Institute spokesman said, "The food bar tastes rather like toasted crumbs. It could keep you alive indefinitely but the monotony might kill you."

* * *

HEART-STOPPAGE "DEEP FREEZE" WAY

Thirty-six people have walked out of a London hospital healthy and well after having their hearts completely covered with ice crystals and stopped, the British medical magazine, the Lancet, announced on Aug. 6, 1961.

This new deep freeze method, devised by a South African trained surgeon, Mr Donald Ross, follows reports that heart-stoppage by drug injections caused muscular damage to the heart, the Lancet said.

Explaining the new operation, Mr Ross writes: "The heart is completely covered with saline-ice crystals, while the circulation is maintained on a cardiac by-pass."

"Heart action stops within about a minute. Ideal operating conditions resulted from this method and 36 patients suffering from a hole in their hearts, blocked heart valves, and other defects, underwent operations without suffering from after-effects," Mr. Ross added.

* * *

METHOD TO EXTRACT TANTALUM

Dr. A. K. Majumdar, Indian scientist has informed the 18th International Congress of Pure and Applied Chemistry of a new method to separate the twin elements of tantalum and niobium, it was announced at Montreal (U.S.A.) on August 11, 1951.

Scientists had for a long time been unable to separate the two elements, which are always found together in the earth's crust.

Dr. Majumdar, of Jadavpur University in Calcutta, has succeeded in separating them using special molecules armed with "pincers" called "ligaments of chelatine."

With this process, their separation and identification are much quicker and more complete than with earlier methods, Dr. Majumdar claimed.

Tantalum is used in electrolytic recti-

fiers in neon tube electrodes and in the artificial soldering of fractured members.

Niobium is used in alloys of steel and chrome, making it easier to solder, and in steels of high thermal resistance.

The name tantalum was given to one of these metals after the many disappointments arising from its extraction. Niobium comes from niobe, the daughter of Tantalus in mythology.

* * *

MUSIC MAKES CROPS GROW

Rock 'N' Roll may soon be played in cornfields—to make crops grow! It sounds fantastic but this may be a result of an experiment carried out by a high school student in Alabama, U.S.

Sixteen-year-old Jimmy Griffith and his friend John Martin, wondered how their maize crops would react when they played the music with a beat.

They decided to put it to the test. At Jimmy's house, two radios were turned on full blast for ten hours a day. At John's home, another crop of maize grew in silent surroundings.

The result was astounding, Jimmy's maize grew to 6½ to 8½ inches, while in the same period John's crop grew only 4 to 5½ inches.

The boys planted oats too, and those got the rock 'n' roll treatment soon outstripped their quiet counterparts, though not so swiftly as in the case of the maize.

The plants were put on display in a high school science fair and a radio was used to demonstrate the project. But the stunted plants heard the beat—and soon caught up with the plants which had undergone the music treatment earlier!

From India, recently, came confirmation that music makes crops grow faster. But soft music in this case.

Professor T. C. N. Singh, Head of the botany department of South India's Annamalai University has had his theories tested in the past two years by Indian agricultural officials.

They discovered that the yield of paddy and other crops increased by from 28 to 60 per cent and the straw yield went up by as much as 75 per cent. Professor Singh also says that the ringing of an electric bell

can so "excite" seeds that they sprout faster.

* * *

NEW DATA ON MOON'S SURFACE

A new "picture" of the moon's surface has been made by Dr. J. E. Gibson of the U.S. Naval Research Laboratory in Washington, from observations made during a lunar eclipse.

The top layer of the moon's surface consists of a material resembling sand, and is only as deep or thick as a piece of heavy cardboard, Dr. Gibson's observations indicate.

Beneath this thin, sand-like layer there is a layer three or four inches (7 to 10 centimeters) deep, which is a good conductor of electricity. Below this layer there is another of unknown depth that resembles rock.

* * *

NEW SOIL STABILIZER

A chemical compound that makes loose soil solid and porous rock impervious to water has been marketed in the United States and is being used to prepare sites for bridges, dams, tunnels, mines and buildings. The product, known commercially as AM-9 Chemical Grout, quickly and permanently stabilises the poorest of soils, even shifting sand, eliminating the danger of excavation cave-ins and sub-surface seepage of water.

Its ability to alter the engineering properties of soil has the advantage of reducing the costs of designing, building and maintaining structures in marginal-land areas.

The new product causes a chemical reaction which permanently modifies the soil. Hence an area to be grouted requires only one application of the new product.

An additional advantage is that the chemical grout can be prepared at the construction site itself and the resulting solution pumped into the earth through specially drilled holes. Unlike conventional grouting materials, which do not readily penetrate fine soil, such as sand, the chemical grout quickly fills all voids in any type of soil. After it has saturated the earth, the chemical solution forms a hard gel that acts as a water barrier. The hardening process can be timed precisely to assure complete penetration before the liquid coagulates.

* * *

DRUG FOR HYPERTENSION

Successful tests of a new drug for treat-

ing hypertension have been made by a team of New Jersey scientists.

The drug is described as the first compound in the benzothiadiazine series in which anti-hypertensive properties, causing a lowering of blood pressure, have been separated from diuretic properties, causing an increase in urine secretion.

It was given in small dose to hypertensive dogs and their blood pressure fell gradually, the journal Science reported.

* * *

STEEL CLOTH FOR PARACHUTES

A new steel product has been developed in the United States, which may be used as a parachute material to help solve the problem of slowing space vehicles as they re-enter the earth's atmosphere. It is steel cloth, woven of stainless steel wire drawn to one-half the thickness of human hair.

One mile (1.6 kilometers) of the wire is required for each square foot (1/10th of a square meter) of the steel fabric, which is so finely woven that water will scarcely pass through it. The material may be of value for re-entry parachutes because ordinary materials cannot stand up against the 1,500 or more degrees Fahrenheit of friction heat generated by re-entry.

The United States Steel Company cooperated with other manufacturers in developing the unique new metal fabric.

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ORIGIN OF SHOOTING STARS DETERMINED

Scientists have at last discovered the true origin and nature of the "shooting stars" that are so often seen in the night skies, particularly during the fall of the year.

All such shooting stars that are bright enough to be seen by the naked eye are tiny pieces of comets dashing at high speed through the earth's atmosphere.

Comets also supply most of the tiny particles known as meteoroids, Dr. Fred L. Whipple, director of the Smithsonian Institution's Astrophysical Observatory at Cambridge, Massachusetts, reported recently to the U.S. National Academy of Sciences.

The definite determination of the source of visual shooting stars is based on analysis of several hundred photographs taken with an especially powerful and sensitive Baker Super-Schmidt camera.



MR. DAG HAMMARSKJOELD

Mr. Dag Hammarskjöld, the United Nations Secretary-General since 1953, was killed in a plane crash near Ndola (Northern Rhodesia) on September 18, 1961.

Dag Hjalmar Agna Carl Hammarskjöld was born in Jongkoping, Sweden, on July 2, 1905. He belonged to a family of soldiers and statesmen dating back to the Swedish Knight Peder Hammarskjöld, who was given his title by Charles IX for courageous defence against the Danes in 1610. His father Mr. Hjalmar was Prime Minister during World War I.

Obtaining his M.A. from Upsala University in 1928, he received his law degree two years later. From 1930 to 1934 he was Secretary to the Government Committee on Unemployment, and in 1933 also associate professor of political economics at the University of Stockholm. In 1934 he obtained his Ph.D. from Upsala.

Mr. Hammarskjöld, who knew several languages, and was elected a member of the Swedish Academy in 1954, was a Vice Chairman of the Swedish Touring Club in 1950, and Chairman of the Swedish Mountaineers' Club from 1945 to 1952. He received honorary doctorates from the University of Pennsylvania, Amherst College, Columbia, California and John Hopkins' University, and Carlton College, Canada.

In 1935 Mr. Hammarskjöld became Secretary to the Bank of Sweden, and the following year Under-Secretary in the Department of Finance. He held the latter post until 1945. From 1937 to 1948 he was also a member of the Advisory Board on the economic status and affairs of Sweden, and from 1941 to 1948 Chairman of the Bank of Sweden's Board of Governors.

During the financial talks between Britain and the U.S.A. in 1944-45, he represented his Government to help in satisfactory negotiations. In 1946 he entered the Swedish diplomatic service as specialist in finance in the Foreign Office. At the Paris Conference in 1947 he was Sweden's delegate at the organization meeting of the Marshall Plan. The following year he became his country's chief delegate to the

Organization of European Economic Cooperation (OEEC).

In 1949 Mr. Hammarskjöld was made Assistant Foreign Minister and in 1951 became Deputy Foreign Minister and a member of the Cabinet. In 1950 he had been elected Chairman of the UNISCAN, an organization of Scandinavian countries and the U.K. set up to promote co-operation among these nations in economic projects and affairs.

He was one of a committee of Foreign Ministers who met in Paris in July 1952 to evaluate a report of financial experts in economics, and to advise the OEEC Council on the action member nations should take.

Mr. Hammarskjöld's first formal contact with the U.N. was in 1952 when he went there as deputy leader of his country's delegation. In February the following year he headed the team, and in April was elected Secretary-General by a vote of 57 of the 60 member States—the "darkest of the dark horses for the post", according to a U.S. journal. He interpreted his election as a "sign of a more co-operative spirit on the part of the Big Five." The U.N. had been without a Secretary-General for more than two years following the resignation of Mr. Trygve Lie of Norway.

His name was actually the knighthood conferred on his forbear in 1610, and an irreverent newspaper columnist once called him the Knight of the Charter. This perhaps explains his strong criticism of Israel, France and Britain for the Suez affair of 1956, and his less vigorous words against Russia for its action in Hungary.

In May 1959, in a speech in Copenhagen, Mr. Hammarskjöld suggested, among other things, that an East-West summit meeting be held within the framework of the U.N. He made many other suggestions later which made him the object of much adverse criticism. But the greatest crisis in his career was yet to come.

In July 1960, soon after the Belgian Congo became independent, rival factions fell out and outside influence on some of them became obvious. Belgian troops sta-

tioned in the Congo were also not withdrawn. Mr. Patrice Lumumba, the Prime Minister, sought U.N. assistance. Mr. Hammarskjöld, who was then in Geneva on his way to South Africa for talks on that country's racial policy, hurried back to the U.N. headquarters.

The Security Council by a resolution authorized him to organize the despatch of U.N. troops to the Congo to help the Government there. Within 48 hours the first U.N. troops arrived in Leopoldville, and within a fortnight 10,000 troops landed there. The U.N. chief showed great powers of organization. He made it clear that the troops, while helping the Government to maintain order and forcing the Belgian troops to withdraw, would not interfere with the country's internal affairs. The Security Council had, a week after his first resolution, also authorized him to see to the Belgian troops' withdrawal.

On July 28, 1960 Mr. Hammarskjöld visited Leopoldville and had talks with Mr. Lumumba and Mr. Kasavubu, the Congo President. In early September Mr. Lumumba charged the U.N. chief with lack of co-operation and an understanding with Mr. Tshombe leader of the breakaway Katanga province, who had earlier declared his determination to prevent the entry of U.N. troops into Katanga. Mr. Hammarskjöld denied the charges, although he had refrained from sending troops to Katanga. A few days later Mr. Lumumba dismissed Mr. Kasavubu, and was in turn dismissed by him and later arrested. Russians accused the U.N. chief of connivance with Mr. Lumumba's dismissal and arrest. The charges centred mainly round the interpretation of the Security Council mandate.

Mr. Hammarskjöld had, before this secured the services of Mr. Rajeshwar Dayal of India, as his personal representative in the Congo, having dispensed with the assistance of Dr. Ralph Bunche. This was generally interpreted as another instance of his neutrality in the clash between the two Power blocs. He had also, in a report to the Council, suggested the establishment of a civil aid fund for the economic development of the Congo.

In September 1960 all the heads of Governments attended the U.N. General Assembly, where Mr. Khrushchev renewed his attack on Mr. Hammarskjöld and suggested that he be replaced by a triumvirate consisting

of an Eastern, a Western and a neutral representative. Mr. Hammarskjöld, who had given a formal reply to the charges on the previous occasion, now hit back with spirit and declared his intention to remain at his post until his term expired.

In January 1961, he paid his interrupted visit to South Africa, under a Security Council authorization of the previous April, and discussed with the Government its racial policy. The talks were fruitless.

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LORD PETHICK-LAWRENCE

Lord Pethick-Lawrence, former Secretary of State for India, died in London on September 11, 1961.

Frederick William Lawrence (he prefixed his wife's name, on marriage, to his own), Lord Pethick-Lawrence of Peaslake was born in London on December 28, 1871. He was the youngest of four children of Alfred Lawrence, whose father, a Cornish carpenter, had founded a prosperous firm of building contractors. He was sent to Eton, where he was apparently happy enough, though somewhat detached in spirit, and was captain of the Oppidans in 1891. He went up to Trinity College, Cambridge and achieved brilliant distinction there. He took a first class in the Natural Sciences Tripos, was Fourth Wrangler, second Smith's prizeman, President of the Union and Adam Smith's prizeman for economics. He also made his mark at tennis and billiards at the same time. In 1897, he was elected to a fellowship at Trinity.

But academic life did not greatly attract him and immediately afterwards he set out on a tour of the Far East. On returning to England he studied law (he later became a barrister) and it was while he was thus engaged that he turned to social work in the East End of London. He became the Treasurer and a moving spirit of Mansfield House, the non-conformist settlement in Canning Town, where his economic studies were broadened by personal investigation into local wage conditions and his labour sympathies ripened. It was there that he met an Evangelist Sister of the West London Methodist Mission, Miss Emmeline Pethick, whom he married in 1901. This was a partnership of a singularly harmonious character.

Although he had come out in unqualified opposition to the war in South Africa, Lord Pethick-Lawrence's political interests

were for some years largely confined to domestic affairs. At the time of his marriage he had acquired a controlling interest in the halfpenny, evening newspapers, and from 1902 until 1905 he was its editor.

During the next two years he was editor of the *Labour Record and Review*. Then came the era of militancy in the women's suffrage movement and with it a social crisis prolonged until the outbreak of World War I. As joint editors of *Votes for Women*, Lord and Lady Pethick-Lawrence threw themselves heart and soul into the campaign of the women's social and political union. He assumed what was virtually complete financial responsibility for its activities—in all he stood bail, he calculated afterwards, for more than 1,000 women militants—and did not waver in principle even under the dictatorial rule of Mrs. Pankhurst.

In 1909 his wife was arrested and imprisoned. In 1912, after a famous demonstration marked by extensive window-breaking in the West End of London, he was arrested, together with his wife and Mrs. Pankhurst, on a charge of conspiracy and sentenced to nine months' imprisonment. All three went on hunger-strike; Lord and Lady Pethick-Lawrence were forcibly fed and were released after five weeks after which they went to Canada to recuperate. By way of political protest he refused to pay the costs of the trial and was adjudged bankrupt upon the petition of the Director of Public Prosecutions—an order annulled in the following year.

Like many other Labour supporters, he was under the sway of pacifist ideas in 1914 and was critical of Britain's participation in the European conflict. He was a prominent figure in the propagandist activities of the Union of Democratic Control, and in April, 1917, he contested South Aberdeen as a "peace by negotiation" candidate. He stood unsuccessfully for South Islington in 1922, but entered the House of Commons in the following year as Labour member for one of the Leicester constituencies, his opponent on that occasion being Mr. Winston Churchill, who was making his last stand as a Liberal. He was not, perhaps, outstandingly impressive on the Labour benches and was lacking in effect even as a financial expert; as a parliamentary speaker he was handicapped by a defective delivery—his dry and jerky manner was in odd

contrast with his wife's natural eloquence. He was irreverently dubbed in the Press Gallery "Pathetic" Lawrence. Nevertheless, his appointment as Financial Secretary to the Treasury in 1929 was soundly practical in the circumstances, since his abilities were undeniable.

Like so many of his Ministerial colleagues, he lost his seat in the 1931 election, but came back to the House in 1935 as member for East Edinburgh. In opposition he gained increasing respect for the breadth of knowledge and sympathy he displayed in the debates on India. He had been a member of the Indian Round Table Conference in 1931, having appealed for precisely such an effort of statesmanship of both sides after visit to India a few years earlier. He was made a Privy Councillor in 1937. By then he had acquired something of the character of a Labour elder statesman but did not hold office again until Mr. Attlee selected him, after the Labour victory in 1945, for the post of Secretary of State for India and Burma. Political India, though it would have preferred to see the abolition of the India Office, warmly welcomed the appointment; both the Congress and the Muslim League, though for different reasons, looked to him expectantly for action which would end the Indian deadlock.

The Indian deadlock remained intractable and in March, 1946, the Secretary of State headed the historic Cabinet Mission, with Sir Stafford Cripps and Mr. A. V. Alexander as his colleagues. A chapter of his fervid contribution to "Mahatma Gandhi" (1949), in collaboration with Mr. H. S. L. Polak and Mr. H. N. Brailford, is devoted to the story of the Mission without disclosing much inner information. The Mission reached New Delhi on March 24, and with the Viceroy (Lord Wavell) at once began its prolonged discussions with party leaders and the Chancellor of the Chamber of Princes. He was deeply disappointed by the failure of the Mission to secure acceptance of its compromise plan of regionalism for the purpose of meeting Muslim League claims, leaving the Centre to have powers only over defence, foreign relations and communications.

Mr. Attlee's announcement in the middle of February, 1947, of a fixed date for the British withdrawal and of the replacement of Lord Wavell by Lord Mountbatten was followed early in April by the resigna-

tion of Lord Pethick-Lawrence. As he had foreseen, the pace quickened, and the withdrawal was ante-dated by 10 months to August, 1947. He gave his utmost support to the Indian Independence Act in its rapid passage through Parliament, and thereafter did all in his power to ingeminate goodwill between the two new dominions.

Lord Pethick-Lawrence was a not uncommon type in English political life, a man of high and humane principle who employed his fortunate personal circumstances in the discharge of a scrupulous sense of public responsibility. His autobiography, "Fate Has Been Kind", published in 1943 when he was 72, leaves an impression of unaffected warmth and simplicity of spirit and of fundamental and undeviating moral purpose. He was much travelled, but was never so happy as in his house in Surrey, where the friendliness and courtesy of the nature which he revealed to his friends gave light and warmth to the personality exhibited in parliamentary debates.

He married again in 1947, Mrs. Duncan McCombie. The title becomes extinct. A writer of some merit, most of his works were on aspects of the British economy.

* * *

JOAO BELCHIOR MARQUES GOULART

Mr. J. Goulart was sworn in as new President of Brazil on September 7, 1961.

He was born on March 1, 1918, on his father's cattle ranch near Sao Borja, Rio Grande do Sul—next door to the ranch of the legendary strongman of the gauchos, Getulio Vargas. At 16, Jango boldly took off in two directions. He studied law at Porto Algere University, where his stocky (5 ft. 7 in., 175 lbs.) good looks won him a Romeo's reputation. At the same time he built his own cattle ranch to fat prosperity.

When the scandal-haunted old dictator committed suicide in 1954, it was Goulart who inherited Vargas' Brazilian Labour Party. The following year he helped win the presidency for Juscelino Kubitschek and the vice-presidency for himself. Goulart used cash and patronage to grease his own political machinery, allied himself with Communists, and last year again won the vice-presidency.

President Janio Quadros quickly showed the Veep who was boss by linking Goulart's name to Kubitschek-regime scandals.

Then Quadros moved to heal the breach by appointing Goulart head of a trade mission to Red China. In Peking, Goulart gushed that "People's China, under the leadership of the great leader Mao Tse tung, is an example that shows how a people can emancipate themselves from the yoke of their exploiters". But his friends say that amiable Jango Goulart is probably more demagogic than Marxist. Before the U.S. Congress in 1956 he said: "The Brazilian people are bound to the American people by very strong affinities in the principles of political ideas. And even today, in a world that is divided between totalitarian and democratic tendencies, of course we are in the camp of the democracies."

MR. AGHA HILALY

Mr. Agha Hilaly is Pakistan's new High Commissioner in India, in place of Mr. A. K. Brohi.

A career diplomat, Mr. Hilaly was born in Mysore on May 20, 1911. He obtained his M.A. degree from Madras University and the degree of B.A. from Cambridge.

Mr. Hilaly joined the Indian Civil Service in 1936. After holding responsible executive appointments under the undivided Government of Bengal, he became Deputy Secretary to the Government of India, Commerce Department in 1947. In August 1947 he opted for service in Pakistan and was appointed Deputy Secretary in the Ministry of Foreign Affairs and Commonwealth Relations. In 1951 he was promoted to the rank of Joint Secretary and acted as Foreign Secretary for some time in 1954. In 1955 he attended the course at the Imperial Defence College, London, and returned to Karachi in 1956.

In August 1956, he was appointed Ambassador to Sweden and was concurrently accredited as Ambassador to Norway and Denmark and Minister to Finland.

On March 9, 1959, Mr. Agha Hilaly was appointed as Ambassador of Pakistan to the Union of Soviet Socialist Republics. He was concurrently appointed as Minister to the Czechoslovak Republic on May 5, 1959.

Concurrent to his appointment as High Commissioner-designate to India Mr. Agha Hilaly has been designated Ambassador to Nepal. The appointment was announced on September 15, 1961.



FOREIGN EVENTS

RESUMPTION OF NUCLEAR TESTS

The Soviet Government announced on August 31, 1961, its decision to resume tests of nuclear weapons, thereby unilaterally ending the self-imposed moratorium on nuclear tests which the U.S.S.R., the United States, and the United Kingdom had observed since the opening on October 31, 1958, of the Geneva Conference on the Discontinuance of Nuclear Weapon Tests. No nuclear tests had been undertaken by the U.S.A. or Britain since the opening of the conference, and none by the Soviet Union since November 3, 1958. The only tests carried out since the latter date had been the four small French nuclear explosions in the Sahara between February 11, 1960, and April 24, 1961; after the last explosion the French Government had announced that no further tests would be held in the atmosphere.

At the time when the Soviet Union decided to resume nuclear weapon tests, the Geneva negotiations had been in progress for nearly three years (including many lengthy recesses) and the U.S., British, and Soviet representatives had held 338 meetings.

A lengthy statement was issued in Moscow on August 31 announcing the Soviet Government's decision to resume tests of nuclear weapons. It said that the Soviet Government had been "compelled to take this step, the significance of which it fully appreciates, under pressure of the international situation created by the imperialist countries", while at the same time reaffirming "the readiness of the Soviet Union to sign at any time an agreement on general and complete disarmament which would put an end to nuclear weapon tests".

After a meeting with members of the National Security Council and Congressional leaders, President Kennedy issued a statement on August 31 describing the Soviet decision to resume nuclear tests as "a form of atomic blackmail primarily designed to substitute terror for reason in the international scene." After expressing "entire confidence" that U.S. nuclear capabilities and delivery systems were "wholly

adequate for the defence needs of the U.S.A. and the free world", the President said that he shared "the disappointment throughout the world that serious and sustained attempts to ban nuclear testing have come to this abrupt end".

In London, Lord Home described the Soviet decision as "shocking news" and accused the Soviet delegation at Geneva of having "been engaged in a stalling operation whilst they brought to maturity the plans they have now announced, which must have been under preparation for many months".

In Paris, officials of the Quai d'Orsay ridiculed the Russian attempt to use France's atomic tests in the Sahara as a pretext for resuming Soviet tests, stressing the limited scope of the French tests in contrast with the avowed power of Russian nuclear weapons. French official spokesmen regarded the Soviet decision as a development of the "policy of intimidation" in which the U.S.S.R. had been engaged since precipitating the Berlin crisis.

President Kennedy and Mr. Macmillan sent a joint appeal to Mr. Khrushchev on September 3 proposing that the three Powers should not conduct nuclear tests in the atmosphere, pledging the Western Powers not to undertake such tests if Russia discontinued her own, and urging that an agreement be reached on this matter not later than September 9.

In a lengthy reply Mr. Khrushchev rejected the Kennedy-Macmillan appeal; accused the U.S.A. and Britain of "stalling" in the Geneva negotiations "while their partner, France, has become a nuclear Power"; and said that the Soviet Government had decided "with an aching heart" to resume nuclear tests because it could "not disregard the possibility of aggression" against the U.S.S.R. He called for "general and complete disarmament" and "the immediate conclusion of a German peace treaty".

Twenty nuclear tests were carried out in the Soviet Union between September 1 and October 15, all in the atmosphere; the detonations were announced by the U.S.

Atomic Energy Commission, no statements being issued in Moscow. Of the first 15 explosions, six were reported as in the "megaton range" (equivalent to 1,000,000 tons of T.N.T.) and the remainder as in the "kiloton range" (equivalent to 1,000 tons of T.N.T.); one particularly powerful explosion, occurring on September 10 in the vicinity of the Arctic island of Novaya Zemlya, was described as "of the order of several megatons". All six megaton explosions took place in the Novaya Zemlya area, and the kiloton explosions in the Semipalatinsk area of Central Asia apart from one monitored as "east of Stalingrad".

Speaking at the Kremlin reception for Major Titov on August 9, Mr. Khrushchev had declared that the Soviet Union possessed the capability of constructing a bomb with an explosive warhead equivalent to 100,000,000 tons of T.N.T. and a rocket to lift it. Marshal Malinovsky (the Defence Minister), writing in "Pravda" on September 14, also stated that the Soviet armed forces had nuclear bombs equivalent to several million tons of T.N.T. which could be delivered to any point on the earth's surface by powerful rockets similar to those which put the spaceships Vostok I and Vostok II into orbit. Commenting on Mr. Khrushchev's statement of August 9, U.S. officials said that the warhead described by Mr. Khrushchev was possible and would be 20 times more powerful than the largest warheads of U.S. missiles; the United States had not tried to make bombs of this size because existing weapons were powerful enough to wipe out cities with a single strike.

On September 5, after the Russians had carried out three nuclear explosions in the atmosphere, President Kennedy announced that he had ordered "the resumption of nuclear tests in the laboratory and underground, with no fall-out", in view of the "continued testing by the Soviet Government." At the same time he emphasized that the Anglo-American offer for an agreement to end all fall-out tests in the atmosphere "remains open until September 9".

Two underground nuclear tests were accordingly carried out in Nevada on September 15-16; both were of low yield and with no radioactive fall-out.

When the Geneva negotiators met on September 4, Mr. Tsarapkin formally recorded his Government's decision to resume

nuclear tests, while Mr. Stelle bitterly criticized this decision and denounced what he described as the "distortions and misrepresentations of Western policy" in the Soviet Government's statement of August 31.

At its 340th meeting on September 9 the conference decided to go into recess after Sir Michael Wright and Mr. Stelle had deplored the Soviet Government's refusal to the Kennedy-Macmillan appeal to stop tests in the atmosphere. It was stated that the conference would remain adjourned until after the whole question of nuclear tests had been debated by the U.N. General Assembly at its 16th session.

* * *

Dr. HAMMARSKJOELD KILLED IN AIR CRASH

Dr. Dag Hammarskjöld, Secretary-General of the United Nations Organization, was killed in an air crash near Ndola (Northern Rhodesia) during the night of Sept. 17-18, 1961. He was to have met President Tshombe at Ndola for talks aimed at restoring peaceful conditions in Katanga, where there had been an outbreak of fighting between Katangese forces and the U.N. Force in the Congo.

The U.N. Secretary-General had left Leopoldville for Ndola on Sept. 17 in a Swedish plane on charter to the United Nations. In addition to Dr. Hammarskjöld, there were on board Mr. William Ranallo (U.S.A.), personal aide to the Secretary-General; Mr. Heinrich Wieschhoff (U.S.A.), the Secretary-General's senior adviser on African affairs; Mr. Vladimir Fabry (U.S.A.), legal adviser to the U.N. in the Congo; Miss Alice Lalande (Canada), secretary to Dr. Sture Linner, head of the U.N. Congo Mission; three U.N. Security guards of American, French, and Irish nationality; and six Swedish aircrew.

The cause of the disaster was unknown and there was considerable obscurity about the circumstances of the flight itself. In view of the disturbed conditions in Katanga, the plane did not fly direct from Leopoldville to Ndola but made a considerable detour to avoid flying over Katangese territory; it was scheduled to arrive at Ndola airport shortly before midnight but had not arrived by that time, although the pilot had briefly contacted the Ndola control post before apparently changing course. When the plane was two hours overdue, air-

craft of the U.N. Congo Command and the Rhodesian Air Force began an intensive search of the wild country along the Congolese-Rhodesian border. During these searches, the wreckage of a burning plane was seen by a Rhodesian aircraft about eight miles from Ndola, having previously been discovered by an African charcoal burner. Of the 14 on board, there was only one survivor—Sergeant Harold Julian, the U.S. security guard, who was taken to Ndola hospital with severe burns and injuries and died there on Sept. 23. The body of Dr. Hammarskjöld was found in the wreckage, together with the bodies of the other victims.

Before his death in hospital Sergeant Julian said that Dr. Hammarskjöld had changed his mind about landing at Ndola and had told the pilot to alter course for another destination. He also said that there had been an explosion on board the plane, followed by a series of smaller explosions, shortly after the aircraft changed course.

A Rhodesian board of inquiry investigating the plane crash issued an interim report on Sept. 28 stating that post-mortem reports on the 14 victims by pathologists had found "no evidence . . . to support any suggestion that the aircraft was fired upon or suffered an explosion in flight". Moreover, the investigations had revealed "no evidence of disease capable of interference with crew function." Lieut-Colonel Maurice Barber, the Director of Rhodesian Civil Aviation, had previously stated that bullets had been found in the body of one of the security guards, but tests by Swedish weapons experts and examination by the pathologists showed that these could not possibly have been fired from a gun, as agreed by Colonel Barber himself. The plane was known to have carried a large amount of ammunition, and the air crash was undoubtedly responsible for the fact that cartridge and percussion caps had been found superficially embedded in the bodies. Expert reconstruction of the crash showed that the plane was apparently running in to land at Ndola with its under-carriage down when it struck tree tops approaching the runway.

AFGHANISTAN BREAKS OFF DIPLOMATIC RELATIONS WITH PAKISTAN

It was announced in Rawalpindi on August 22, 1961 that the Pakistan Govern-

ment had decided to close its two Consulates in Afghanistan (at Jalalabad and Kandahar) and had requested the Afghan Government to close its Consulates and trade agencies in Pakistan by September 6.

The announcement said that the decision to close down the Pakistani Consulates had been taken because of "persistent harassment of the members of the Consulates' staff by the Afghan Government". A spokesman of the Pakistani Foreign Office said that "harassment" of the consular staff by the Afghan authorities had been going on for a long time and that the Pakistan Government had taken the decision to close the Consulates only when these had been "completely paralysed". The first protest had been lodged with the Afghan Government as far back as 1959; although many similar protests had been made since then, the Afghan Government had not taken any steps to redress the Pakistani grievances and (the spokesman added) "our hands were forced."

In reply to questions the spokesman explained that Afghan domestic servants had not been allowed to take employment at the Consulates; gardeners, barbers, sweepers, electricians, and laundrymen had likewise not been allowed to offer their services to the Pakistanis; and shopkeepers had been forbidden to sell essential commodities to them. In addition, restrictions had been imposed on the movement of the Pakistani consular staff, who had been frequently "shadowed, insulted, and abused" by Afghan Intelligence officials". The spokesman emphasized, however, that Pakistan would continue to provide all the existing transit facilities for Afghan trade now in existence.

An Afghan Note was handed to the Pakistani Ambassador in Kabul on August 31 stating that diplomatic relations between the two countries would be considered as severed unless the Pakistan Government withdrew within one week its demand for the closure of the Afghan Consulates and trade agencies in Pakistan.

According to Kabul Radio, the Afghan Note expressed "sorrow" at the Pakistan Government's "unilateral" action, and continued; "If the Pakistan Government insists on its decision and does not take any step to improve the situation, the action of the Pakistan Government would leave no ground for the existence of

diplomatic relations between the two countries. Consequently the Afghan Government would be compelled to sever diplomatic relations with Pakistan. It was broken within one week after the handing over of this Note. The Afghan Government would consider this decision as the direct result of the Pakistan Government's policy."

As the Pakistan Government refused to change its decision about the Afghan Consulates, and maintained its demand for their closure, the Afghan Government broke off diplomatic relations on September 6 as threatened and closed its Embassy, Consulates, and trade agencies in Pakistan.

The Pakistan Foreign Ministry spokesman stated on September 6 that its Embassy staff in Kabul would leave the Afghan capital the same day and that Britain had been asked to look after Pakistan's interests in Afghanistan. On September 7, however, the Pakistani Foreign Minister (Mr. Manzur Qadir) announced that the Afghan Government had refused permission to the British Embassy in Kabul to look after Pakistan's interests, and that the Pakistan Government might ask some other country to represent it.

BUDDHISM PROCLAIMED STATE RELIGION OF BURMA

Legislation making Buddhism the State religion of Burma was introduced in the Burmese Parliament on Aug. 17, 1961 by the Prime Minister, U Nu, and adopted by both Houses. In introducing this legislation—the constitution (Third Amendment) Bill—U Nu emphasized that all other religions would be fully recognized, as already guaranteed in the Constitution of the Union of Burma.

U Nu explained that when Burma became independent in 1947 it was the Government's intention to make Buddhism the State religion, as desired by the Buddhist majority of the nation. Such action had not been taken at the time, however, because of the struggle with the insurgent factions. Later, when the situation became more normal, the Government had initiated arrangements for the holding in 1956 of the Sixth Great Buddhist Council. During that year he had felt that the "great deed of merit in successfully and gloriously convening the Great Council" should be followed by "another equally great and meritorious deed in making it possible for Buddhism to become

the State religion." This, he was convinced, was the overwhelming wish of the Buddhist monks and laymen and of the Buddhist majority of the people.

After taking this decision, he had had discussions with both Buddhist and non-Buddhist leaders and subsequently set up two Commissions, of monks and laymen respectively, to study the question of making Buddhism the State religion. These Commissions had travelled extensively throughout the country, taken evidence from all sections of the population, and presented reports on the basis of which the Constitution (Third Amendment) Bill had been drawn up.

As regards the position of other religions, U Nu said: "We sincerely desire that the Bill making Buddhism the State religion should avoid any provision whatsoever which would in any way restrict or affect, either directly or indirectly, the right to profess freely any religion—a right which is firmly guaranteed in the Constitution."

In a fervent appeal for the observance of true Buddhist principles by the Buddhist majority of the nation, U Nu emphasized that Buddhism was being made the State religion not for the sake of "festivals and celebrations" but "to help fulfil completely the wish of Lord Buddha." He added: "What is His wish? . . . He does not wish living beings in the 31 worlds to circle incessantly in the four neither worlds, the world of humans, the six celestial abodes, and the 20 domains of brahma gods—subject to birth, old age, disease, death, separation from loved ones, association with unloved ones, and other such sufferings of (the) cycle of existences. . . . He desires living beings to be delivered from these sufferings. . . . and to realize Nibbana (Nirvana), where there is no more old age, sickness, and death, and no more rebirth. . . ."

The Constitution (Third Amendment) Act contained the following principal provisions:

(1) Buddhism, "being the religion professed by the great majority of the citizens of the Union," was declared to be the State religion of Burma.

(2) The Burmese Government would "promote and maintain the welfare and advancement of Buddhism in its three aspects—namely, *pariyatti sasana* (study of the Teachings of the Buddha), *patipatti*

sasana (practice of the Teachings), and **pavivedha sasana** (enlightenment).

(3) The Government would "protect the Buddhist religion. . . from all dangers, including insult and false representation by words, either spoken or written, or by other means."

(4) The Government would maintain and preserve the Tipitaka Pali Texts, and the Commentaries thereon, "as re-examined and recited at the Sixth Great Buddhist Council."

(5) The State would give "assistance and aid in the restoration of those ancient pagodas and temples which were built by the kings of old and are famous in Burmese history as enshrining relics of the Buddha, and which may have fallen into disuse on account of wars, insurrections, earthquakes, or other calamities."

The Bill was adopted by the Chamber of Deputies on Aug. 17 by 220 votes to 15, and by the Chamber of Nationalities (the Upper House) on Aug. 23 by 100 votes to 15. It was approved on Aug. 26 at a joint session of both Houses by 324 votes to 28, and signed the same day by U Win Maung, the President of the Union.

* * *

DAHOMÉY CAPTURES PORTUGUESE ENCLAVE

The Portuguese Government announced on July 29, 1961, that the West African Republic of Dahomey had ordered Portugal to quit the enclave fortress of Sao Joao Baptista de Ajuda by Monday, July 31. The tiny enclave in the former French colony consisted of only four African constables and a Portuguese representative, Capt. Henrique Saraiva Borges.

Capt. Borges was in Lisbon when Dahomey delivered its ultimatum. He was immediately instructed to resume his post.

Portuguese officials said that after the ultimatum was delivered, the French Consulate-General in Lisbon, which handles Dahomey's affairs in Portugal, had declined to grant a visa to Captain Borges.

On the first anniversary of its independence on August 1, the Dahomey Republic took over the 300-year-old Portuguese trading port on the Atlantic coast.

Shortly after midnight, Dahomey soldiers invaded the five-acre enclave of Sao Joao Baptista de Ajuda and captured the

Portuguese Resident, the only civilian Portuguese there.

Watched by the Dahomey Vice-President and a wildly cheering crowd of Africans, the soldiers drove the Resident to the border of neighbouring Nigeria.

Then they ran down the Portuguese flag and raised Dahomey's. The event was hailed as the achievement of total territorial independence and "a Dahomey victory over Portuguese colonialism."

Dahomey President Hubert Maga ordered that the Resident get out of the enclave by midnight of July 31, but the Resident stuck on. By midnight of the deadline day, Dahomey Government officials presented themselves with soldiers at the enclave to get the Resident to leave.

Earlier, the Resident had sought an interview with President Maga, but the President refused to receive him.

The Resident surrendered to the soldiers and police without a fight. Hundreds of Dahomeans clustered outside the fort grounds booed and whistled as he was driven away.

The enclave is a small collection of buildings just off the highway running from Ghana through Goto and Dahomey to Nigeria.

The Portuguese Government charged Dahomey with unprovoked aggression for its seizure of the enclave.

In a formal protest note the Portuguese Foreign Ministry charged Dahomey with "an act against a decision of the United Nations and said it would defend its rights by all means at its disposal."

The Government of Dahomey on August 3, accused Portugal of aggression against the people of Ouidah town following the burning of buildings in the Portuguese enclave there by the Portuguese Resident.

A communique issued after a Cabinet meeting, presided over by President Hubert Maga, said Dahomey considered the aggression as "very serious" and "proclaim their determination to defend their rights by all appropriate means."

The communique said that without the direct intervention of the authorities the Resident and the secretary "would have experienced the effects of the anger of an excited crowd ready to lynch them."

HOME AFFAIRS

STATE CHIEF MINISTERS' CONFERENCE

A three-day Conference of State Chief Ministers on steps to promote national integration began in New Delhi on August 10, 1961 with a unanimous decision to make it a penal offence for any individual or group to advocate secession of any part of India.

This decision was taken after the Madras Home Minister, Mr. M. Bhaktavatsalam's report on the separatist activities of the Dravida Munnetra Kazhagam and other political groups in South India was adopted.

With the Prime Minister, Mr. Nehru in the chair, the Conference was attended by all Chief Ministers except those of West Bengal and Rajasthan. All senior Central Ministers were also present.

While the Rajasthan Chief Minister, Mr. M. L. Sukhadia had been injured in a car accident, the West Bengal Chief Minister, Dr. B. C. Roy was present the following day when the Conference discussed problems relating to language and linguistic minorities.

Another important decision the Chief Ministers took was that three new All-India Services should be constituted—engineering, forest and medical—as recommended by the States' Re-organization Commission six years earlier.

The Conference therefore, promptly agreed that the "rule of rotation of officers in the existing All-India Services between the Centre and the States should be more rigorously followed".

On the Second day of the Conference (August 11), ways and means of combating communalism and providing effective safeguards to linguistic minorities were inconclusively discussed. A highlight of the discussion was the consideration of the West Bengal Chief Minister, Dr. B. C. Roy's proposal that every State should be declared multilingual and that minority languages should be adopted as State languages if spoken by not less than five per cent of the population of a State.

Most Chief Ministers and Central Ministers expressed themselves against the proposal as in their view no State could function in a dozen languages. Some suggested that the percentage should be raised from five to at least 50—even 70—to make the formula applicable at the district level.

The Conference, however, agreed with the suggestion reportedly made by the President, Dr. Rajendra Prasad, in a recent Note to the Prime Minister, Mr. Nehru, that all the States should try to be multilingual in the sense that every State, to some extent must give adequate facilities to all the other languages of India.

It was also generally agreed that, as urged by the President, every State Government should show the same spirit of accommodation to the minority language or languages in its region as shown by the Centre to the non-Hindi-speaking States on the question of adopting Hindi as the official language.

The consensus favoured an interesting suggestion by a few that the Hindi-speaking State should go one step further and actively encourage the learning of at least one South Indian language within their area.

A considerable part of the discussion was devoted to the question of promoting national integration through education. It was generally felt that the States should follow the lead given by the Kerala Government in effectively nationalizing text-books.

The authorities must also take over the responsibility of getting the right kind of text-books to be prepared. It was broadly agreed that the mother-tongue should be the medium in the primary stage and the State language at the secondary stage.

Opinion over the medium of instruction at the university stage was, however, divided. While some urged that the medium should be the regional language, others agreed with Mr. Nehru that this would tend to isolate learning in the higher stages by keeping students and teachers from other regions away.

The Conference concluded on August 12 after expressing itself in favour of a common script for all Indian languages. Such a script, it felt, would be of great help in bringing about national integration.

A detailed 2,000-word Press Note issued later said that the meeting was of the opinion that this script "in existing circumstances could 'only be Devnagari.'" However, since it might be "difficult to adopt a common script in the near future, this objective should be kept in mind and worked for."

The Conference, which mainly discussed "the question of language in its various aspects, welcomed the Centre's decision to accord English the status of an associate official language and re-affirmed with certain variations the general principles embodied in the Central Government's memorandum of 1956 regarding the safeguards for linguistic minorities.

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NATIONAL INSTITUTE OF EDUCATION SET UP

According to a Press release on September 3, 1961 a National Institute of Education has been set up by the Central Government to conduct educational research, to train educational personnel at an advanced level and to carry on extension and field services.

The National Institute, one of the few institutes of the kind in the world, would be located in Delhi and affiliated to the University of Delhi.

The decision to set up the National Institute was taken at the first meeting of the Governing Body of the National Council of Educational Research and Training held recently under the chairmanship of Dr. K. L. Shrimali, Central Minister of Education and President of the Governing Body.

A number of Central institutions, including the Central Institute of Education, the National Institute of Audio-Visual Education, the National Institute of Basic Education, the National Fundamental Education Centre, the Bureau for Text-book Research, the Bureau for Educational and Vocational Guidance, and the Directorate of Extension Programmes for Secondary Education, would be amalgamated into the National Institute of Education which would mobilize the resources and facilities of the constituent institutions and develop

an integrated programme. The National Institute's programme of training would be designed to serve as a model for teacher education programmes and as one of the sources of supply of highly trained professional personnel for training colleges, research institutions and educational administration.

The training programme would cover pre-service teacher education and also in-service training of key personnel at all stages of education. For pre-service training, candidates for M.Ed. and Ph.D. would be drawn from all parts of the country, thus ensuring that each area receives the benefit of the Institute's programmes.

The programme of extension and field services would cover and expand the scope of the activities at present being undertaken by the Directorate of Extension Programmes for Secondary Education. The extension function would be related to the problems in the field, rendering assistance in developing experimental projects, organizing in-service programmes for teachers and arranging for consultant services to the State Departments.

On the training and research side of the Institute a number of departments were proposed to be formed on the lines of the present B.Ed. training.

The overall management and administration of the National Institute would be vested in the National Council of Educational Research and Training, an autonomous body registered under the Societies Registration Act of 1860 and set up by the Central Government in July, 1961.

The Council consists of the Central Minister of Education (who is the ex-officio President of the Council) and the Educational Adviser to the Central Government, who is the ex-officio Vice-President.

Other members of the Council were the State Education Ministers, the Vice-Chancellor of Delhi University (ex-officio), the chairman of the University Grants Commission (ex-officio), the members of the Governing body of the National Council and other nominees, not exceeding 12, of the Government of India.

SEVEN MAJOR HEAVY INDUSTRIAL PROJECTS

The location has been announced of seven major heavy industrial projects to

be taken up in the public sector during the Third Plan period. Of the two Precision Instruments Projects, one will be set up at Kotah in Rajasthan and the other in Kerala. One Heavy Electrical Equipment plant will be located in Ranipur in Uttar Pradesh and another near Hyderabad in Andhra Pradesh. The plant for High Pressure Boilers will be set up in the Tiruchi area of Madras State and the Heavy Plate and Vessel Works and Heavy Structural Works near Wardha in Maharashtra. Pinjore near Chandigarh in Punjab has been chosen for the Machine Tool Project. Together the seven projects will cost Rs. 125 crores, nearly half of it in foreign exchange which has already been arranged. The two Precision Instruments factories, the Machine Tool Plant and the Heavy Plate and Vessel Works will be ready within three years and the rest by the end of the Plan period.

Announcing the decision on the location of the projects at a news conference in New Delhi on September 20, the Minister for Industry, Shri Manubhai Shah, said this was a major step towards balanced regional development. Giving details of the projects, he said the two Precision Instruments Plants will be among the biggest of their kind in the world and will produce a wide range of the most modern high precision industrial instruments. The Rajasthan Plant will manufacture electronic and electro-magnetic instruments and the one in Kerala hydraulic, pneumatic and mechanical instruments. The Heavy Electrical Plant, to be set up in Uttar Pradesh, will manufacture turbines, AC/DC motors and a wide range of other heavy equipment. The items which the other Heavy Electrical Plant in Andhra will take up for manufacture will include steam turbines. The High Pressure Boilers Plant, in Madras State, will meet the needs of the future thermal power plant. The Heavy Plate and Vessel Works and Heavy Structural Works in the Wardha area will turn out 12,500 tons of high quality plates and vessels needed by the chemical fertiliser and petro-chemical industries. The heavy structural shops will have an output of 25,000 tons. The Machine Tool Plant at Pinjore near Chandigarh is being set up by the Hindustan Machine Tools. It will turn out every year 2,000 machines worth Rs. 6 crores. This will be the third such unit.

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ITALIAN CREDIT FOR OIL INDUSTRY IN INDIA

An agreement providing for Indo-Italian cooperation in the establishment of petroleum industries in India was signed in New Delhi on August 29. Under the agreement, the E.N.I. (the Italian Government undertaking) will make available to the Government of India a credit upto 60 million Italian lire (equivalent to nearly Rs. 46 crores) for the supply of plants, equipment and technical services for the public sector petroleum projects in two categories. The first category includes projects for which the general provision has already been made in the Third Five Year Plan, such as transport pipe-line for petroleum products from Barauni to Delhi and Barauni to Calcutta, gas fractionation plant, liquid petroleum gas bottling plant and distribution facilities, lubricating oil plant, supply of crude oil production equipments and also distribution equipments. Among the list of projects is also included contract drilling for any areas specified by the Oil and Natural Gas Commission. In the second category will come additional projects like petro-chemicals and some others which will be considered by the Government.

FORTHCOMING EXAMINATION Indian Military Academy Examination April, 1962

The Union Public Service Commission will hold an examination at various places on 17th and 18th April, 1962 for entry into the Indian Military Academy.

Age limits: Candidates must have been born not earlier than 2nd January, 1942, and not later than 1st January, 1945. These age limits can in no case be relaxed.

Qualifications: Intermediate or equivalent.

Application forms and full particulars obtainable from Secretary, Union Public Service Commission, Dholpur House, D.H.Q.P.O., New Delhi-11, by remitting Re 1.00 by money order or on cash payment at the counter.

(The procedure to obtain application forms is explained on page 1029 of this issue).

Completed applications must reach the Union Public Service Commission by 11th December, 1961 (26th December, 1961, in case of candidates abroad).



FOOTBALL

I.F.A. Shield

The replayed final of the I.F.A. Shield Tournament between East Bengal, the Senior League champions and Mohun Bagan, the holders, ended in a goalless draw, despite extra time at Calcutta on September 27.

It was, however, decided that the trophy be shared by the teams. The loss of the coin gave Mohun Bagan the right to keep the trophy for the first six months. This is for the first time that the trophy is being shared between two teams. The teams were meeting for the sixth time in the final.

Inter-University Soccer Championship

Calcutta retained the Mukherjee Shield beating Madras by three goals to one in the final of the Inter-University Football Championship at the Bakshi Stadium in Srinagar on October 10. This is the sixth time that Calcutta have won the shield.

ATHLETICS

World Bantam Weightlifting Crown

The Soviet muscleman, Stogov, won the world and European bantam weightlifting crown at Vienna on September 20, merely because he weighed 200 grammes more than his Hungarian opponent, Foeldi.

Both boys lifted a total (snatch, press, jerk) of 345 kilograms in the first event of the championships. Japan's V. Mijke came third in the event with a total lift of 337 kilograms.

BADMINTON

Inter-University Badminton Championship

Bombay beat Delhi in the all-India final of the Inter-University Badminton Championship for men by three matches to two at Hyderabad on October 5. Bombay University thus scored a double, for they won both the men's and women's championships.

TABLE TENNIS

Inter-University T-T Championship

Bombay retained the All-India Inter-University table tennis championship, beat-

ing Jadavpur 3-0 in the final played in Kanpur on October 15.

Bombay won all their matches without any difficulty, barring a few anxious moments.

In the women's final, Poona beat Delhi by three matches to two.

TENNIS

World Professional Tennis Title

Ken Rosewall of Australia won the World Professional Tennis title when he beat Pancho Gonzalves, of Los Angeles, 2-6, 6-4, 6-3, 8-6 in the final at the Roland Garros Stadium in Paris on September 18.

Davis Cup Inter-Zone Semi-final

In a thrill-packed series that was watched by record crowds on all the three days, the United States won the Davis Cup Inter-Zone semi-final tennis tie against India by three matches to two.

In a sense, the New Delhi series followed Indian sports writers' expectations. India and America won two singles each, and the American victory in the crucial double provided the winning score for the United States.

The highlight of the three-day sports event came in the last singles encounter between the Indian and Asian champion Ramanathan Krishnan and the Wimbledon-finalist "Chuck" McKinley of the U.S. team.

Demonstrating to the full his mastery of the game, Krishnan brought off a triumph in the fifth and final set to earn a standing ovation of both the American and Indian enthusiasts.

The match between India and the United States was the first inter-zone semi-final of the Davis Cup to be staged in this country since the inception of this international competition 61 years ago.

The first Davis Cup match was played in 1900 at the Longwood Cricket Club of Boston, Massachusetts. The donor of the now famous silver trophy was Dwight F. Davis, then a student of Harvard University. Davis himself was a member of the American team that won the first "Davis Cup" match from the British.

Today the Davis Cup competitions have attained world-wide popularity—a popularity undreamt by the people who witnessed the first matches or by the founding Davis. In the formative years it remained a two-team affair, until in 1904, when France and Belgium entered the court. Australia and Austria joined in 1905 and since then it has increased gradually to include 35 nations. India made her debut in 1921. The Davis Cup, officially known as The International Lawn Tennis Championship, is now divided into three zones—European, American and Eastern.

Sixty-one years of the Davis Cup has done more than just expand and include new nations in its challenge rounds. The game itself has gone through radical changes. Gone are the unown grass courts, the sagging nets and the soft balls of the first game at Boston. They have been replaced by gravel courts, regulation nets and balls.

Even the technique of the game has been revolutionised. In 1909, strapping Maurice McLoughlin introduced a reverse-twist service which caused the ball to break sharply on a high hop to his opponent's backhand. This is a difficult shot to handle for anyone except a left-hander. After his delivery the red-headed Californian would charge to the net for the "kill". McLoughlin smashed his way to the final round of the 1909 championship. He won the title in 1912 and 1913.

But McLoughlin's popularity and fame was eclipsed by William T. ("Big Bill") Tilden, who is regarded as one of the greatest racket swingers in the history of the game. "Big Bill", in 1920, led an American Davis Cup team to victory over Australia and began a long reign of international supremacy in tennis. The United States held the trophy for seven years. In 1927 France won from the Americans and held the Cup for six years.

While the Davis Cup was in France the challenge round matches were played on clay for the first time. This surface is most commonly used throughout the world today, but England, Australia and the United States have always defended the trophy on grass.

Australians are now carrying on the "big game" tradition of Tilden and have made tennis their national sport. Australia

has dominated the Davis Cup realm for most of the last decade.

Though the Davis Cup has been won by only four nations—the United States, Britain, France and Australia, it has been a prime factor in fostering goodwill and good feeling among all the participating nations.

India's Past Performances: The following are India's achievements in this world-famous tournament.

1947—India lost to France 0-5 (European Zone).

1948—India lost to Britain 3-2 (European Zone).

1949 to 51—No participation.

1952—India lost to Italy at Brisbane (Eastern Zone).

1953—India lost to Belgium 5-0 at Perth in inter-zone semi-final.

1954—India beat Austria 3-0 (European Zone); lost to France at Paris 1-4.

1955—India beat Egypt 5-0 (European Zone); lost to Britain 2-3 at Manchester in 3rd round.

1956—India beat Ceylon at Colombo 5-0 (Eastern Zone); beat Japan at Tokyo 3-2 (in zone final); lost to U.S. at Perth 1-4 in inter-zone semi-final.

1957—India beat Malaya at Madras 5-0 (Eastern Zone); lost to Philippines 2-3.

1958—India beat Monaco 4-1 (European Zone); lost to Italy 2-3.

1959—India (East Zone champions) lost to Australia in Inter-Zone final at Boston 1-4.

1960—India lost to Philippines 2-3 in East Zone final.

SPORTS INFORMATION

Robot Tennis Coach

A new coaching machine for tennis players, called the "Strokemaster", has been designed by a London firm that specialises in sports equipment.

Rhona Salter, described how this versatile machine works in a recent edition of the "New Ideas" programme broadcast weekly in the BBC General Overseas Service.

"Suppose you want to practise your backhand drives," she said, "all you do is fix the appropriate striking head to the machine, fill up the container with a maximum of 54 balls, pick up your tennis racket and switch on. Out will come 54 backhand drives, strong and accurate. The speed and

rate of delivery can both be varied from 9 to 90 miles per hour and from one ball every four seconds to one ball every two seconds. In this way it benefits the experienced player as much as the beginner; and, in fact, Dan Maskell, the famous tennis coach, said recently that it was the best aid he had ever seen for tennis practice and instruction."

The "Strokemaster" can be used successfully either on indoor or outdoor courts, and, while not cheap, should prove well worth its price as a time-saver to clubs, schools and sports centres.

Roy Gilchrist Banned

Roy Gilchrist, the West Indies fast bowler, has been banned for life from playing in the North Staffordshire Cricket League.

The ban was announced on September 15 by Mr. J. Douglas Schofield, secretary of the North Staffordshire League.

Gilchrist, professional to the Great Chell club, has been debarred from playing in any future matches in the League because of alleged "ungentlemanly conduct" in two League games last month.

Chapman Dead

Arthur Percy Frank Chapman, the former England and Kent cricket captain, died in Alton (Hampshire) at the age of 61. He had been in ill-health for some years.

He brought to cricket a zest and ability which won for him the highest honour the game can confer—the captaincy of England—and the respect and admiration of players and spectators at home and abroad.

In 1926, Chapman successfully led England against Australia, and he helped to retain the Ashes in 1928-29, when he again captained the England team in Australia.

He was on the losing side only once in the Test matches and on that occasion he nearly saved the game by scoring a fine century.

Although cricket was his first love, he was an all-round athlete, excelling at rugby football, soccer (as goalkeeper), squash, tennis and golf.

New Channel Swim Marks

Argentine swimming instructor Antonio Abertondo and Pakistani businessman Brojen Das both shattered English Channel swimming records on September 22.

Abertondo, 42, landed at Dover to become the first man ever to swim the tough swirling 20-odd miles of sea between England and France each way nonstop.

Das set up a 10-hour 35-minute Franco-to-England all-time record.

Abertondo's 43-hour history-making marathon silenced for ever experts who had believed the feat humanly impossible.

The 15-stone Buenos Aires, swimmer crawled exhausted over the rocks at St. Margaret's Bay at Dover as dawn broke on Sept. 22, eyes and lips swollen, to throw himself, weeping, into the arms of his adviser, Sam Rocket.

The Rajkumari Scheme

The Rajkumari Sports Coaching Scheme has ceased to exist in its present set-up with effect from October 1.

The Coaching Scheme has been merged with the National Institute of Sports in Patiala and will thereafter function as a "coaching wing" of the Institute under the administration of the Institute's Board of Governors.

This decision has been taken by the Union Government on the advice of the All-India Council of Sports and in consultation with the National Institute of Sports.

From October 1, the services of all full-time coaches who are working with the Scheme are transferred to the coaching wing of the Institute. Part-time coaches desirous of working as full-time workers, would also be taken over by the coaching wing provided they successfully completed the ad hoc training course at the Institute.

At present there are 61 full-time and 17 part-time coaches working under the Scheme. The Committee of the Coaching Scheme met recently at the National Stadium. It finalised details in regard to the action to be taken to make the integration with NIS possible and to ensure that there was no interruption in the activities of the Coaching Scheme.

Efforts are being made to keep the headquarters of the coaching wing in Delhi.

No race can prosper till it learns that there is as much dignity in tilling a field as in writing a poem.

—Booker T. Washington

Appointments, Awards etc.

APPOINTMENTS

Mr. R. Krshnaswami assumed charge of the General Manager of the Chittaranjan Locomotive Works on September 25.

Mr. Justice S. Ramachandra Iyer, acting Chief Justice of the Madras High Court, has been appointed permanent Chief Justice of that court.

Dr. Mohammed Abdul Rauf, at present Indian Ambassador to Belgium and Luxembourg, has been appointed Ambassador to Switzerland and concurrently Minister to the Vatican. He assumes charge of the new assignment in December.

Mr. S. G. Ramachandran has been appointed Ambassador of India to Madagascar. He is expected to assume charge of his new post in November.

Tunisia's Chief delegate, **Mr. Mongi Slim**, was elected President of the 16th Session of the U.N. General Assembly on September 20.

On September 21, the Nagaland Interim body elected **Mr. T. N. Angami** as its Chairman in place of **Dr. Imkongliba Ao**.

Mr. Andre Wendelen was appointed Belgian Ambassador in India on September 21.

Mr. Inderjeet Bahadur Singh has been appointed Political Officer in Sikkim in succession to **Mr. Apa B. Pant**.

Mr. Gopala Menon was appointed head of the Indian Investment Centre in New York on September 23.

Mr. Purshottam Lal Bhandari was appointed Indian Ambassador to Mexico on September 29. He has been concurrently appointed as Ambassador to Cuba also.

Mr. Abdol Hussein was appointed Iranian Ambassador in India on October 1.

Mr. Sigvard Ekland of Sweden was elected as Director-General of the International Atomic Energy Commission on October 3.

Mr. Isham Hashim, the first Ambassador-designate of Jordan to India, presented his credentials to Vice-President, **Dr. S. Radhakrishna** on October 5.

In a Government reshuffle announced on October 9 by Prime Minister **Harold Macmillan**, **Mr. Reginald Maudling** became the Britain's new Colonial Secretary. He succeeds **Mr. Ian Macleod**, who has become the Chancellor of the Duchy of Lancaster, a non-departmental portfolio he takes on special assignment.

It was announced in Lucknow on October 10 that **Prof. A. V. Rao**, **Dr. B. P. Sinha**, **Dr. A. C. Chatterji** and **Dr. P. D. Gupta** have been appointed Vice-Chancellors of the Lucknow, Allahabad, Gorakhpur and Agra Universities, respectively for a period of three years.

The outgoing Irish Prime Minister, **Mr. Sean Lewass**, was re-elected Prime Minister in Dublin by Dail (Parliament) on October 11.

Mr. K. H. Khurshid was officially declared elected President of occupied Kashmir (Ajad Kashmir) on October 12.

RESIGNATIONS ETC.

The Imam of Yemen abdicated the throne of Yemen in favour of his son, **Crown Prince Albadr Mohamed**.

Six members of the State Assembly from the autonomous hill districts of Assam resigned their seats on October 14.

Mr. Kanwar Sain, Chairman and Administrator of the Rajasthan Canal, relinquished his post on October 15 to join the secretariat of the U.N. Lower Mekong Project.

AWARDS

Queen Elizabeth conferred on October 3 a peerage on **Mr. Anthony Armstrong-Jones**, husband of Princess Margaret. He assumes the title of Earl of Snowdon.

Mr. Yasushi Nagao, staff photographer of "Mainichi Press" was awarded on October 2 the top prize in the 1961 world Press Photo Exhibition for his picture of the assassination in Tokyo of **Mr. Inajiro Asanuma**, Japanese Socialist leader.

Dr. A. N. Khosla, President of the National Institute of Sciences of India, announced on October 6 the award of the **Meghnad Saha** gold medal to **Dr. H. J. Bhabha** for his contributions to theoretical physics and of the award of the **Sunder Lal Hora** gold medal to **Professor M. O. P. Iyengar** for his researches in Algacology.

Sir Bernard Lovell, Director of the Jodrell Bank Radio-telescope was named in Washington on October 9 as the winner of the **Daniel and Florence Guggenheim** international astronautics prize for outstanding contributions to progress of astronautics.

VISITORS

Mr. Averell Harriman, U.S. Roving Ambassador, arrived in New Delhi on September 21.

Mr. Jusidino Kubitschek de Oliveira,

former President of Brazil, arrived in New Delhi on October 6 on a 4-day visit as the guest of the Union Government.

Mr. Jerome Wiesner, Scientific Adviser to President Kennedy, arrived in New Delhi on October 7 on a 3-day visit.

The "Charitable Vagabond", Mr. Raoul Follereau of France, founder of the World Leprosy Day and president of the Order of Charity, Paris, arrived in New Delhi on October 10 on a short visit to India.

The Polish President Aleksander Zawadski arrived in New Delhi on October 11 from Indonesia on a three-day visit to India.

Miss Isabel McCorkindale, former President of the World Women's Christian Temperance Union, arrived in New Delhi on October 13 in the course of a world tour.

Dr. S. Chandrasekhar, well-known astro-physicist and professor of theoretical astro-physics at Yerkes Observatory University of Chicago, arrived in New Delhi on October 16 to deliver a series of lectures.

OBITUARY

Secretary-General Dag Hammarskjöld and 12 other U.N. Officials died on September 18 when the U.N. DC-6 ploughed into the ground and burned in Ndola, Northern Rhodesia (Congo Border).

Mr. Jadavendra Nath Panja, President of the West Bengal Pradesh Congress Committee, died in Calcutta, on September 21.

Mr. Charu Sarkar (64), a veteran journalist, died of heart attack in New Delhi on September 23.

Sir David Monteath (74), former Permanent Under-Secretary of State for India and Burma died in London on September 29.

Chico Marx (70), oldest member of the famed Marx Brothers who transformed low comedy into high art, died in Hollywood on October 11.

Prince Louis Rwagasore, Prime Minister of Burundi, East African territory which is a part of Ruanda Urundi, under Belgian trusteeship, was murdered on October 13.

A Japanese physicist, Dr. Kolchimuraji (52), who studied the effect of radio-activity on the human body in the atom-bombed cities of Hiroshima and Nagasaki died in Tokyo on October 14.

Mr. Surya Kant Tripathi "Nirala" (65), the renowned Hindi poet, died in Allahabad on October 15 after a year-long illness.

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NEWS Diary



SEPTEMBER

14. West Germany agreed to grant India a long-term credit of 170,000,000 Deutsch marks to help finance India's Third Plan.

The British Government denounced the latest U.N. action in Katanga as an unwarranted "coup de grace" and a move of doubtful legality and little moral justification.

The Big Four Western Foreign Ministers opened the three-day talks in Washington on how to meet the Soviet pressure on West Berlin.

Mr. Krishna Menon laid the foundation stone of the Institute of Nuclear Medicine and Allied Sciences, being set up in New Delhi by the Ministry of Defence.

15. The Punjab Police raided gurdwaras in Ambala, Ludhiana, Fatehgarh Sahib and Nabha, to arrest proclaimed offenders connected with the current Akali Struggle.

16. Two former Turkish Ministers—Fatin Zorlu (Foreign Minister) and Hassan Polatkan (Finance Minister) were hanged today after being convicted on charges of violating the Constitution.

It was announced that a new registered society with an 'ad hoc' executive of eight members had taken over the functions of the Sangcet Natak Akademi from September 11, 1961.

17. Mr. Adnan Menderes, former Prime Minister of Turkey, was hanged for crimes against the Turkish Constitution during his 10-year-rule.

Dr. Adenauer's Christian Democratic Party lost their absolute majority in the Bundestag (Lower House) in today's elections in West Germany while the Social Democrats gained heavily.

20. Katanga and United Nations signed a provisional ceasefire agreement at Ndola (Northern Rhodesia).

Jamaica, the largest and wealthiest member of the New West Indies Federation, created by Britain to form a chain of free islands in the Caribbean, voted to withdraw from the Federation.

22. The Congolese Government warned the U.N. that it would be obliged to resort to its own resources to end Katanga's secession.

The U.G.C. appointed a 12-member Committee, headed by Prof. N. K. Sidhanta, to inquire into the standard of University Education in India in the past 15 years and suggest steps to improve it.

The Opposition no-confidence motion against the Katju Ministry was defeated in the Madhya Pradesh State Vidhan Sabha by a voice vote.

President Nkrumah took over as "Supreme Commander" of Ghana's armed forces.

25. The West Bengal Legislative Assembly passed the West Bengal Official Language Bill 1961 which sought to provide for the adoption of Bengali as the language to be used for the official purposes of the State including purposes of legislation.

27. All controls on distribution and prices of sugar including restrictions on inter-State movement were removed.

The General Assembly admitted the West African State of Sierra Leone to the U.N. as its 100th member.

28. It was announced in Amman (Jordan) that an army revolt in Syria ended after only seven hours. But the revolt flared up again after truce talks with the Government broke down.

Mr. Moshin Bin Ahmed of the Muslim League was elected from the Kuttipuram Constituency in the Kerala by-election.

29. France and Tunisia signed an agreement under which French troops will withdraw from in and round Bizerta town to positions they occupied before the fighting of last July.

The Syrian insurgent regime set up a secessionist Government under Dr. Mamouny Kuzbari.

30. The French air at Marrakesh (Morocco) was handed over to Morocco, the last military installation to be evacuated by French under a year-old agreement between the two countries.

OCTOBER

1. Master Tara Singh broke his 48-day-old fast today.

The four-day National Integration Conference concluded in New Delhi.

President Nasser severed relations with Jordan and Turkey for recognising the new regime of Syria.

2. Yogiraj Suryadev broke his 49-day-old fast.

The Security Council Shelved membership applications by Mauritania and Outer Mongolia rather than face possible vetoes by the Soviet Union and Kuomintang China.

3. French forces completed their evacuation of Bizerta which they partially occupied last July.

A 24-hour curfew was clamped in Aligarh City following communal clashes.

Negotiations between U.N. officials and Katanga representatives broke down after President Tshombe accused the U.N. of breaking the provisional ceasefire.

4. The A.I.C.C. approved the Congress Election Manifesto outlining the "grand strategy" underlying the domestic and foreign policies of the ruling party.

The Ghana Government ordered the arrest of 50 persons including opposition leaders, on charges of plotting to assassinate President Nkrumah and other Ministers.

5. The All-India Congress Committee concluded its two-day session in Madurai after unanimously approving the resolutions on national integration and international affairs.

Nepal and China signed a boundary treaty in Peking.

The British Bank Rate was cut from 7 to 6½ per cent.

6. The three-day Hindu Convention began in New Delhi with the demand that India should become a "nation-in-arms" to defend its territorial integrity.

The French police imposed a curfew on all Algerians in Paris from 8.30 p.m. to 5.30 a.m.

The Soviet Union and India signed an agreement in Vienna on the peaceful use of the atomic energy based "on full equality".

7. The controversial Mahakuma Parishad clause in the Assam Official Language Act, 1960, was deleted by the Assam Assembly

by adopting an amending Bill brought forward by Chief Minister B.P. Chaliha.

8. The three Laotian princes agreed in Hin Heup that the neutralist leader, Prince Souvanna Phouma, should be Premier of the future Laotian Provisional Government.

9. The date for Uganda's independence was officially announced in London as October 9, 1962.

10. The U.K. applied for membership of the six-nation European Common Market.

11. The Vice-President, Dr. S. Radhakrishnan released the waters of the Rajasthan Canal at Hanumangarh (Rajasthan).

The General Assembly declared an address delivered by the South African Foreign Minister, Mr. Eric Louw, to be "offensive, fictitious and erroneous" in content and censured him and his Government for it.

President Camarvo of Columbia, decreed a state of siege, equivalent to martial law, only a few hours after the Government crushed an attempted Right-wing revolt by army troops.

THE BERLIN CRISIS

(Continued from page 976)

ments, Mr. Eisenhower, Mr. Macmillan and Mr. De Gaulle met in Paris on December 19-21, 1959 and decided to meet Mr. Khrushchev at a "summit" conference in Paris in May 1960. This "summit" was scuttled by Mr. Khrushchev without even having a formal meeting. From that time Mr. Khrushchev has been blowing hot and cold on the Berlin issue. He has again precipitated the crisis over Berlin and has threatened to carry out a unilateral peace treaty with East Germany by the end of this year. The Western Powers have shown a great restraint and have not taken any reciprocal measures to aggravate the situation. At present there is a partial easing of the tension as the West has agreed to negotiate with the Soviet Union on a peaceful settlement of the Berlin crisis. The alternative to peaceful negotiations is nuclear war and both sides are aware of the consequences of such a catastrophe. It would be better that the German problem should be settled as early as possible. As long as this problem is kept alive, there will be no peace between the East and the West.